

## **Summary of 1999 Crude Oil Reserve Changes**

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Reserve Changes**

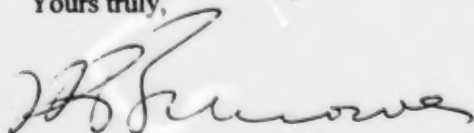
**EUB ST 2000-18A****April 2000****Supplement to 1999 Year-end  
Reserve Publication EUB ST 2000-18****SUMMARY OF 1999 CRUDE OIL RESERVE CHANGES**

Over the past year, the Board's Resource Appraisal Group and Resource Applications Group staff has designated new oil pools, revised reserves in existing pools because of new drilling or reassessment of reserves, and approved various schemes for improving ultimate oil recovery. These changes are summarized on the following attachments:

- ATTACHMENT I**
- pools in which recoverable reserves were revised as a result of pool development or reservoir re-evaluation.
  - new pools declared in 1999.
  - pools which lost their confidential status.
  - pool name changes.
- ATTACHMENT II**
- schemes which received enhanced recovery recognition during 1999.

Inquiries concerning this publication may be directed to the Board's Resource Appraisals Group telephone 297-8566.

Yours truly,



**Andy Burrowes**  
Section Leader  
Oil Reservoir Administration  
Resource Appraisal Group

**Attachments**

# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Acheson Blairmore C	48.6	42.2	-6.4	Re-evaluation - Decreased Ri
Acheson Blairmore K	188.0	213.0	+25.0	Re-evaluation - Increased Ri
Acheson D-2 C	43.8	26.3	-17.5	Re-evaluation - Decreased Ri
Acheson D-3 B	59.5	17.9	-41.6	Re-evaluation - Decreased Ri
Acheson East Blairmore K	6.7	19.9	+13.2	Re-evaluation - Increased N & Ri
Acheson East Blairmore L	0.4	2.3	+1.9	Resumed Production Operations
Acheson East Blairmore O	Conf	15.9		
Acheson East Blairmore P	Conf	62.2	+44.1	Coalesced Acheson East Blairmore J & P Pools
Adams Gilwood B	23.3	26.1	+2.8	Re-evaluation - Increased Ri
Aerial Mannville Primary Gas Flood	20.0 309.0	28.6 357.0	+8.6 +48.0	Re-evaluation - Increased Ri Re-evaluation - Increased Ri
Albright Charlie Lake B	Conf	15.1		
Alderson Arcs D	448.0	123.0	-325.0	Re-evaluation - Decreased Ri
Alderson Lower Mannville H	84.5	96.3	+11.8	Re-evaluation - Increased Ri
Alderson Lower Mannville AA	30.2	24.7	-5.5	Re-evaluation - Increased N & Decreased Ri
Alderson Lower Mannville MM	27.2	34.0	+6.8	Re-evaluation - Increased Ri
Alderson Lower Mannville AAA	221.0	247.0	+26.0	Re-evaluation - Increased N & Ri
Alderson Lower Mannville CCC	10.8	8.5	-2.3	Pool Abandoned
Alderson Lower Mannville HHH	4.9	3.1	-1.8	Pool Abandoned
Alderson Lower Mannville H2H	472.0	537.0	+65.0	Re-evaluation - Decreased N & Increased Ri
Alderson Lower Mannville I2I	0.9	17.1	+16.2	Resumed Production Operations
Alderson Lower Mannville R2R	181.0	211.0	+30.0	Re-evaluation - Increased Ri
Alderson Lower Mannville I3I & Detrital J	109.0	146.0	+37.0	Re-evaluation - Increased Ri
Alderson Lower Mannville N3N	93.8	117.0	+23.2	Re-evaluation - Increased Ri
Alderson Lower Mannville V3V	39.3	50.5	+11.2	Re-evaluation - Increased N
Alderson Lower Mannville D4D Water Flood	200.0	400.0	+200.0	Enhanced Recovery Recognition
Alderson Lower Mannville I4I	12.2	32.4	+20.2	Re-evaluation - Increased N & Ri
Alderson Lower Mannville T4T	Conf	22.7		
Alderson Lower Mannville U4U	Conf	10.6		
Alderson Lower Mannville V4V	0.0	12.1	+12.1	
Alderson Lower Mannville W4W	Conf	0.4		Pool Abandoned

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Alderson Lower Mannville X4X	Conf	0.5		Pool Abandoned
Alderson Lower Mannville Z4Z	0.0	7.4	+7.4	
Alderson Pekiako E	5.8	10.2	+4.4	Re-evaluation - Increased Ri
Alderson Upper Mannville D Water Flood	220.0	242.0	+22.0	Re-evaluation - Decreased N & Increased Ri
Alderson Upper Mannville Z Water Flood	743.0	836.0	+93.0	Re-evaluation - Increased Ri
Alderson Upper Mannville AA Water Flood	26.3	28.0	+1.7	Re-evaluation - Increased Ri
Alderson Upper Mannville AAA	1.7	0.0	-1.7	Delete - Coalesced with Upper Mannville WW & Lower Mannville OO Pools
Alderson Upper Mannville Y2Y	3.9	0.5	-3.4	Pool Abandoned
Alderson Upper Mannville C3C	Conf	18.3		
Alexander Basal Quartz L	2.7	4.1	+1.4	Re-evaluation - Increased Ri
Alexander Basal Quartz M	0.0	9.2	+9.2	
Alix D-2	587.0	620.0	+33.0	Re-evaluation - Increased Ri
Alliance Blairmore	164.0	145.0	-19.0	Re-evaluation - Decreased Ri
Amber Keg River C	38.3	33.7	-4.6	Re-evaluation - Decreased Ri
Amber Keg River H	28.5	8.5	-20.0	Resumed Production Operations
Amber Keg River P	30.0	27.2	-2.8	Re-evaluation - Decreased Ri
Amber Keg River S	30.0	26.4	-3.6	Re-evaluation - Decreased Ri
Amber Keg River T	39.0	34.5	-4.5	Re-evaluation - Decreased Ri
Amber Keg River W	48.2	36.2	-12.0	Re-evaluation - Decreased Ri
Amber Keg River Y	24.1	12.0	-12.1	Re-evaluation - Decreased Ri
Amber Keg River GG	20.8	19.2	-1.6	Re-evaluation - Decreased Ri
Amber Keg River HH	137.0	251.0	+114.0	Pool Development - Increased N
Amber Keg River KK	7.5	1.0	-6.5	Pool Abandoned
Amber Keg River PP	65.0	13.0	-52.0	Re-evaluation - Decreased Ri
Amber Keg River QQ	9.1	24.9	+15.8	Pool Development - Increased N & Ri
Amber Keg River RR	47.9	19.1	-28.8	Re-evaluation - Decreased Ri
Amber Keg River TT	32.1	8.0	-24.1	Re-evaluation - Decreased N & Ri
Amber Keg River XX	21.5	8.6	-12.9	Re-evaluation - Decreased Ri
Amber Keg River CCC	3.5	0.5	-3.0	Re-evaluation - Decreased N & Ri
Amber Keg River FFF	36.3	4.0	-32.3	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Amber Keg River GGG	9.2	0.1	-9.1	Re-evaluation - Decreased Ri
Amber Keg River III	48.9	0.8	-48.1	Re-evaluation - Decreased Ri
Amber Keg River KKK	0.0	24.8	+24.8	
Amber Keg River MMM	0.0	1.2	+1.2	
Amber Muskeg C	38.7	45.2	+6.5	Re-evaluation - Increased Ri
Amber Muskeg J	31.6	15.8	-15.8	Re-evaluation - Decreased Ri
Amigo Keg River G	96.6	110.0	+13.4	Re-evaluation - Increased Ri
Amigo Keg River K	2.1	4.6	+2.5	Resumed Production Operations
Ante Creek Beaverhill Lake Primary	0.0	54.0	+54.0	Declare Primary Reserves
Solvent Flood	2847.0	2313.0	-534.0	Delete Miscible Reserves
Ante Creek Dunvegan D	Conf	101.0		
Ante Creek North Triassic C	122.0	24.4	-97.6	Re-evaluation - Decreased Ri
Ardenode Glauconitic A	Conf	4.1		
Armada Basal Quartz J	Conf	0.6		
Armistie Blairmore	476.0	524.0	+48.0	Re-evaluation - Increased Ri
Atlee-Buffalo Glauconitic A	7.1	19.2	+12.1	Re-evaluation - Increased N & Ri
Atlee-Buffalo Glauconitic H	192.0	240.0	+48.0	Re-evaluation - Increased Ri
Atlee-Buffalo Glauconitic L	0.0	12.9	+12.9	New Pool - Previously Part of Atlee-Buffalo Glauconitic G
Atlee-Buffalo Upper Mannville F	114.0	160.0	+46.0	Re-evaluation - Increased N & Ri
Atlee-Buffalo Upper Mannville G	192.4	195.0	+2.6	Re-evaluation - Increased Ri
Atlee-Buffalo Upper Mannville P	20.6	45.4	+24.8	Re-evaluation - Increased Ri
Atlee-Buffalo Upper Mannville CC	Conf	13.5		
Atlee-Buffalo Upper Mannville EE	Conf	3.5		
Auburndale Wainwright B	155.0	309.0	+154.0	Re-evaluation - Increased Ri
Badger Upper Mannville P	10.7	15.0	+4.3	Re-evaluation - Increased Ri
Balsam Kiskatinaw I	Conf	56.6		
Bantry Mannville A Primary	7960.0	8295.0	+335.0	Re-evaluation - Decreased N & Increased Ri
Bantry Mannville B	528.0	616.0	+88.0	Re-evaluation - Increased Ri
Bantry Mannville D	1794.0	2014.0	+220.0	Pool Development - Increased N & Ri
Bantry Mannville LL	6.3	7.5	+1.2	Re-evaluation - Increased Ri
Bantry Mannville XX	24.0	33.6	+9.6	Re-evaluation - Increased Ri

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Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Bantry Mannville OOO	0.0	9.3	+9.3	
Bantry Pekisko K	6.9	8.3	+1.4	Re-evaluation - Increased Ri
Bantry Pekisko N	48.0	56.0	+8.0	Re-evaluation - Increased Ri
Bantry Sunburst J	37.4	13.9	-23.5	Re-evaluation - Decreased N & Ri
Bantry Sunburst Pekisko A Primary	2.0	5.0	+3.0	Re-evaluation - Increased Ri
Bashaw Basal Mannville FF	45.6	11.7	-33.9	Re-evaluation - Decreased N & Ri
Bashaw D-2 F	453.0	252.0	-201.0	Re-evaluation - Decreased Ri
Bashaw D-2 I	151.0	92.0	-59.0	Re-evaluation - Decreased N & Ri
Bashaw D-2 M	0.0	63.0	+63.0	New Pool - Previously part of Bashaw D-2 I Pool
Bashaw D-3 B	31.7	39.6	+7.9	Re-evaluation - Increased Ri
Bassano Lower Mannville F	2.4	0.1	-2.3	Re-evaluation - Decreased N & Ri
Bassano Upper Mannville F	30.0	45.0	+15.0	Re-evaluation - Increased Ri
Bassano Upper Mannville K	8.4	10.0	+2.6	Re-evaluation - Increased Ri
Beaverlodge Charlie Lake A	1.2	4.4	+3.2	Resumed Production Operations
Bellis Upper Mannville P2P	Conf	11.3		
Belloy D-1 B	85.4	71.8	-13.6	Re-evaluation - Decreased Ri
Belloy D-1 L	155.0	111.0	-44.0	Re-evaluation - Decreased Ri
Belloy D-1 M	36.6	28.0	-8.6	Pool Abandoned
Belloy D-1 O	18.8	23.7	+4.9	Resumed Production Operations
Belloy D-1 P	11.9	16.6	+4.7	Re-evaluation - Increased Ri
Bellshill Lake Upper Viking A	2.0	3.4	+1.4	Resumed Production Operations
Berland River Cardium A	18.7	0.1	-18.6	Re-evaluation - Decreased N & Ri
Berland River Dunvegan A	0.0	4.1	+4.1	
Berry Lower Mannville O	0.0	13.9	+13.9	
Berry Upper Mannville C	106.0	80.9	-25.1	Re-evaluation - Decreased N & Ri
Berry Upper Mannville EE	110.0	66.0	-44.0	Delete Enhanced Recovery Recognition
Bigoray Cardium B Water Flood	1395.0	1581.0	+186.0	Re-evaluation - Increased Ri
Bigoray Ellerslie D Primary	22.6	19.7	-2.9	Re-evaluation - Decreased N
Water Flood	285.0	188.0	-97.0	Re-evaluation - Decreased N & Ri
Bigoray Nisku D Water Flood	704.0	1034.0	+330.0	Re-evaluation - Increased Ri

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Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Bigoray Nisku E Water Flood	640.0	700.0	+60.0	Re-evaluation - Increased Ri
Bigoray Nisku F Solvent Flood	2352.0	2436.0	+84.0	Re-evaluation - Increased Ri
Bigoray Nisku H Water Flood	1012.0	1210.0	+198.0	Re-evaluation - Increased Ri
Bigoray Nisku K Water Flood	505.0	566.0	+61.0	Re-evaluation - Increased Ri
Bigoray Ostracod H	106.0	48.7	-57.3	Re-evaluation - Decreased N
Bigoray Ostracod I	3.0	1.4	-1.6	Re-evaluation - Decreased Ri
Bigstone Cardium B	14.9	11.9	-3.0	Re-evaluation - Decreased Ri
Bigstone Cardium C	19.7	23.4	+3.7	Re-evaluation - Increased N
Bigstone Dunvegan E	5.9	0.2	-5.7	Pool Abandoned
Bigstone Second White Specks B	7.2	0.3	-6.9	Re-evaluation - Decreased N & Ri
Bilawchuk Halfway B	Conf	4.1		
Bilbo A Cardium B	16.9	20.0	+3.1	Re-evaluation - Increased N
Bittern Lake Ellerslie M	32.0	3.3	-28.7	Re-evaluation - Decreased Ri
Bittern Lake Viking B	4.9	0.3	-4.6	Re-evaluation - Decreased N & Ri
Black Butte Mannville B	103.0	200.0	+97.0	Re-evaluation - Increased N & Ri
Black Keg River F	Conf	12.5		
Black Keg River G	0.0	20.7	+20.7	
Blackfoot Ellerslie E	0.0	3.2	+3.2	
Blackfoot Glauconitic D	96.0	125.0	+29.0	Re-evaluation - Increased Ri
Blackfoot Glauconitic F	10.6	15.5	+4.9	Re-evaluation - Increased N & Ri
Blackfoot Glauconitic H	1.9	3.8	+1.9	Re-evaluation - Increased N
Blueridge Jurassic L	0.0	5.7	+5.7	
Bollique Blueridge A	Conf	92.2		
Bonanza Boundary C	3.9	8.1	+4.2	Resumed Production Operations
Bonanza Charlie Lake B	Conf	2.6		
Bonanza Gething D	7.0	0.4	-6.6	Re-evaluation - Decreased N & Ri
Bonanza Kiskatinaw D	9.0	7.6	-1.4	Re-evaluation - Decreased Ri
Bonnie Glen Cardium A	214.0	330.0	+116.0	Re-evaluation - Increased Ri
Boundary Lake South Triassic E Primary	283.0	354.0	+71.0	Re-evaluation - Increased Ri

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Boundary Lake South Triassic I	47.5	33.3	-14.2	Re-evaluation - Decreased Ri
Boundary Lake South Triassic T	Conf	20.6		
Bow Island Lower Mannville C	9.7	12.6	+2.9	Resumed Production Operations
Bow Island Sawtooth D	347.0	402.0	+55.0	Re-evaluation - Decreased N & Increased Ri
Bow Island Sawtooth G	87.0	102.0	+15.0	Pool Development - Increased N
Bow Island Sawtooth L	2.5	3.5	+1.0	Re-evaluation - Increased Ri
Bow Island Sawtooth M	80.8	92.6	+11.8	Pool Development - Increased N
Bow Island Sawtooth T	99.2	0.0	-99.2	Delete - Coalesced with Bow Island Sawtooth U
Bow Island Sawtooth U	16.5	357.0	+340.5	Pool Development - Increased N & Ri Coalesced Sawtooth U & W
Bow Island Sawtooth X	Conf	5.6		
Bow Island Sawtooth Y	Conf	144.0	+34.0	
Bow Island Sawtooth Z	Conf	5.7		
Brant Ellerslie B	0.0	5.5	+5.5	
Brazeau River Belly River Q	7.9	5.8	-2.1	Re-evaluation - Decreased Ri
Brazeau River Belly River V & W	23.5	16.3	-7.2	Re-evaluation - Decreased Ri
Brazeau River Belly River BB	17.0	18.1	+1.1	Re-evaluation - Increased Ri
Brazeau River Belly River II Primary	10.4	20.8	+10.4	Re-evaluation - Increased Ri
Brazeau River Belly River MM	2.2	5.5	+3.3	Resumed Production Operations
Brazeau River Belly River PP	5.0	3.3	-1.7	Re-evaluation - Decreased N & Increased Ri
Brazeau River Belly River SS	0.2	3.7	+3.5	Resumed Production Operations
Brazeau River Belly River LLL Water Flood	93.3	140.0	+46.7	Enhanced Recovery Recognition
Brazeau River Belly River RRR	18.8	0.5	-18.3	Re-evaluation - Decreased Ri
Brazeau River Belly River B2B	Conf	13.1		
Brazeau River Belly River C2C	0.0	21.0	+21.0	
Brazeau River Belly River D2D	0.0	1.8		
Brazeau River Belly River H2H	0.0	5.4	+5.4	New Pool - Previously part of Brazeau River Belly River E&F
Brazeau River Belly River J2J	0.0	10.9	+10.9	
Brazeau River Blairidge B	47.7	31.8	-15.9	Re-evaluation - Decreased Ri
Brazeau River Cardium C	148.0	133.0	-15.0	Re-evaluation - Decreased Ri
Brazeau River Cardium BB	0.0	17.6		

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## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Brazeau River Nisku L Water Flood	346.0	403.0	+57.0	Re-evaluation - Increased Ri
Brazeau River Rock Creek M	Conf	17.4		
Brazeau River Second White Specks C	Conf	7.4		
Brazeau River Viking D Primary	12.6	86.2	+73.6	Re-evaluation - Decreased N & Increased Ri
Briker Colony D	5.5	9.8	+4.3	Re-evaluation - Increased Ri
Brooks Pekisko A	13.4	26.8	+13.4	Re-evaluation - Increased Ri
Calais D-3 A	385.0	492.0	+107.0	Re-evaluation - Increased N & Decreased Ri
Campbell-Namoo Blairmore A	257.0	262.0	+5.0	Re-evaluation - Increased Ri
Campbell-Namoo Blairmore G	6.2	17.8	+8.6	Coalesced Campbell-Namoo Blairmore G & X Pools
Campbell-Namoo Blairmore P	1.4	2.5	+1.1	Resumed Production Operations
Campbell-Namoo Blairmore T	2.6	4.1	+1.5	Re-evaluation - Increased Ri
Campbell-Namoo Blairmore U	4.4	6.2	+1.8	Re-evaluation - Increased Ri
Caroline Cardium E Primary	195.0	148.0	-47.0	Re-evaluation - Decreased N & Ri
Caroline Cardium I	6.9	8.5	+1.6	Re-evaluation - Increased Ri
Caroline Cardium R Primary Water Flood	105.0 76.0	83.5 156.0	-21.5 +80.0	Re-evaluation - Decreased N Re-evaluation - Increased N
Caroline Elktion M Water Flood	169.0	195.0	+26.0	Re-evaluation - Increased N
Caroline Rundle A Primary	1400.0	1610.0	+210.0	Re-evaluation - Increased Ri
Caroline Viking N	3.7	1.1	-2.6	Re-evaluation - Decreased Ri
Caroline Viking P	4.5	1.0	-3.5	Re-evaluation - Decreased Ri
Caroline Viking S Primary Water Flood	343.0 0.0	75.0 402.0	-118.0	Re-evaluation - Decreased N Enhanced Recovery Recognition
Caroline Viking X	126.0	92.1	-33.9	Re-evaluation - Increased N & Decreased Ri
Carrot Creek Cardium B Water Flood	24.2	20.4	-3.8	Re-evaluation - Decreased Ri
Carrot Creek Cardium I	17.6	15.4	-2.2	Re-evaluation - Decreased Ri
Carrot Creek Cardium FF	11.2	3.7	-7.5	Re-evaluation - Decreased N & Ri
Carrot Creek Cardium JJ	32.4	25.2	-7.2	Re-evaluation - Decreased Ri
Carrot Creek Cardium PP	20.2	17.2	-3.0	Re-evaluation - Decreased Ri
Carrot Creek Jurassic MM	Conf	8.8		

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## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Carrot Creek Lower Mannville M, Jurassic O, P, V & W	230.0	245.0	+15.0	Re-evaluation - Increased Ri
Carrot Creek Lower Mannville V	15.4	20.0	+4.6	Re-evaluation - Increased Ri
Carstairs Viking B	20.0	18.9	-1.1	Re-evaluation - Decreased Ri
Cavalier Glauconitic A Water flood	174.0	197.0	+23.0	Re-evaluation - Increased Ri
Cavalier Glauconitic D	23.2	1.6	-21.6	Re-evaluation - Decreased Ri
Cavalier Glauconitic O	21.2	2.3	-18.9	Re-evaluation - Decreased N & Ri
Cavalier Viking A	4.8	0.5	-4.3	Re-evaluation - Decreased N & Ri
Cecil Charlie Lake O	255.0	403.0	+148.0	Re-evaluation - Increased N
Centron Lower Mannville B	0.0	9.9	+9.9	
Cessford Basal Colorado H, P, Mannville M & U4U	9.1	1.1	-8.0	Re-evaluation - Decreased N & Ri
Cessford Mannville WW	0.5	2.7	+2.2	Re-evaluation - Increased Ri
Cessford Mannville T2T	20.3	7.3	-13.0	Re-evaluation - Decreased N & Increased Ri
Cessford Viking VV	12.6	6.9	-5.7	Re-evaluation - Decreased Ri
Chamberlain Blairmore	51.1	115.0	+63.9	Re-evaluation - Decreased N & Increased Ri
Charlie Gething H & I	Conf	47.1		Pools Commingled
Chauvin Lloydminster E	7.2	0.1	-7.1	Pool Abandoned
Chauvin Mannville A Water Flood	1403.0	1464.0	+61.0	Re-evaluation - Increased Ri
Chauvin Sparky A Water Flood	105.0	120.0	+15.0	Re-evaluation - Increased Ri
Chauvin Sparky E & General Petroleum A	222.0	212.0	-10.0	Re-evaluation - Decreased N
Chauvin Sparky K	3.0	7.5	+4.5	Re-evaluation - Increased Ri
Chauvin Sparky L	54.6	91.0	+36.4	Re-evaluation - Increased Ri
Chauvin South General Petroleum I	6.8	0.7	-6.1	Pool Abandoned
Chauvin South Lloydminster G	5.7	0.4	-5.3	Pool Abandoned
Chauvin South Mannville MU No. 1 Primary	1866.0	1872.0	+6.0	Pool Development - Increased N
Chauvin South Sparky M	14.3	14.6	+0.3	Coalesced Chauvin South Sparky M & Z Pools
Chauvin South Sparky HH & General Petroleum GG	48.8	73.2	+24.4	Re-evaluation - Increased Ri
Chauvin South Upper Mannville F	9.3	0.4	-8.9	Pool Abandoned
Cherhill Detrital A	5.8	4.1	-1.7	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Cherhill Nordegg D	0.0	9.8	+9.8	
Cherry Glauconitic A	Conf	25.2		
Chickadee Gething D	0.2	0.5	+0.3	Re-evaluation - Increased Ri
Chicken Chinook D	11.6	8.9	-2.7	Re-evaluation - Increased N & Decreased Ri
Chicken Chinook J	Conf	18.0		
Chigwell Belly River H	0.0	7.1	+7.1	
Chigwell Belly River I	0.0	4.8	+4.8	
Chigwell D-2 C	69.9	90.4	+20.5	Re-evaluation - Increased N & Decreased Ri
Chigwell D-3 A	8.4	6.5	-1.9	Re-evaluation - Decreased Ri
Chigwell Mannville FF	0.0	16.7	+16.7	
Chigwell Viking D	4.2	0.0	-4.2	Coalesced Chigwell Viking B & D Pools
Chigwell North Ellerslie B	Conf	9.7		
Chin Coulee Basal Mannville A Water Flood	1106.0	1290.0	+184.0	Re-evaluation - Increased Ri
Chin Coulee Basal Mannville C	0.0	1.0	+1.0	New Pool - previously in Chin Coulee Glauconitic C & Basal Mannville A Pool
Chin Coulee Glauconitic C & Basal Mannville A Primary	82.7	66.0	-16.7	Re-evaluation - Increased N & Decreased Ri
Water Flood	1053.0	1106.0	+53.0	Re-evaluation - Increased N
Chin Coulee Sawtooth B	168.0	260.0	+92.0	Re-evaluation - Increased N & Ri
Chinchaga Slave Point D	0.0	63.5	+63.5	
Chinchaga Slave Point E	0.0	51.0	+51.0	New Pool - previously part of Chinchaga Slave Point D
Chinchaga North Slave Point A	1026.0	2052.0	+1026.0	Re-evaluation - Increased Ri
Chinchaga North Slave Point B	9.3	0.3	-9.0	Re-evaluation - Decreased Ri
Chip Lake Belly River A	19.6	1.6	-18.0	Re-evaluation - Decreased N & Ri
Clair Gething A	Conf	8.1		
Clair Halfway A	35.4	27.5	-7.9	Re-evaluation - Decreased N
Clair Halfway C	0.0	50.3	+50.3	
Clair Halfway D	Conf	12.2		
Claresholm Barons B	1.6	0.7	-0.9	Re-evaluation - Decreased Ri
Claresholm Barons D	82.2	20.6	-61.6	Re-evaluation - Decreased Ri
Claresholm Blairmore B	180.0	148.0	-32.0	Re-evaluation - Decreased N & Increased Ri
Claresholm Rundle E	0.0	21.2	+21.2	Establish Oil Reserves

\* Year-end Review Pools

\*\* Abbreviations

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**ATTACHMENT I**

**1999 RESERVE CHANGES**  
**Initial Established Crude Oil Reserves**  
**at 31 December**

<b>Pool</b>	<b>1998 10<sup>3</sup> m<sup>3</sup></b>	<b>1999 10<sup>3</sup> m<sup>3</sup></b>	<b>Change 10<sup>3</sup> m<sup>3</sup></b>	<b>Reason for Change</b>
Claresholm Rundle G	5.4	0.3	-5.1	Re-evaluation - Decreased N & Ri
Clive D-2 A Primary	34.0	51.0	+17.0	Re-evaluation - Increased Ri
Clive D-2 D	0.0	37.5	+37.5	
Clive D-3 A Water Flood	7800.0	7320.0	-480.0	Re-evaluation - Decreased Ri
Clive Ellerslie J	0.0	1.3	+1.3	
Columbia Belly River A	Conf	24.8		
Compeer Bakken B	0.0	4.1	+4.1	New Pool - previously in Compeer Banff D
Compeer Banff D	12.5	8.1	-4.4	Re-evaluation - Decreased N
Compeer Banff F	0.0	1.5	+1.5	New Pool - previously in Compeer Banff D
Connemara Rundle A	16.3	1.0	-15.3	Delete Pool
Conrad Sawtooth B	7.3	8.7	+1.4	Re-evaluation - Increased Ri
Cordel Cardium A	86.3	223.0	+136.7	Pool Development - Increased N
Cordel Cardium B	66.8	105.0	+38.2	Pool Development - Increased N
Cornwall Gilwood A	10.2	2.6	-7.6	Re-evaluation - Decreased Ri
Countess Lower Mannville X	170.0	256.0	+86.0	Re-evaluation - Increased Ri
Countess Lower Mannville FF	8.2	0.8	-7.4	Delete Pool
Countess Lower Mannville GG	7.8	19.5	+11.7	Re-evaluation - Increased N
Countess Lower Mannville PP	Conf	5.0		
Countess Lower Mannville QQ	Conf	24.9		
Countess Lower Mannville RR	Conf	33.9		
Countess Lower Mannville SS	0.0	7.6	+7.6	New Pool
Countess Lower Mannville TT	Conf	7.6		
Countess Ostracod D	37.2	50.7	+13.5	Re-evaluation - Increased Ri
Countess Upper Mannville F Water Flood	714.0	748.0	+34.0	Re-evaluation - Increased Ri
Countess Upper Mannville J	89.3	141.0	+51.7	Pool Development - Increased N & Ri
Countess Upper Mannville PP Primary	0.0	22.8	+22.8	Establish Primary Reserves
Countess Upper Mannville HHH Water Flood	56.4	69.6	+13.2	Re-evaluation - Increased Ri
Countess Upper Mannville NNN	18.0	9.0	-9.0	Re-evaluation - Decreased N
Coutts Moulton K	0.0	7.4	+7.4	New Pool - Previously part of Coutts Moulton A

\* Year-end Review Pools

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# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Craigmyle Ostracod B	4.5	1.3	-3.2	Pool Abandoned
Crossfield Cardium A				
Primary	48.5	52.0	+3.5	Re-evaluation - Increased Ri
Water Flood	3237.0	3486.0	+249.0	Re-evaluation - Increased Ri
Crossfield Rundle B	13.8	2.2	-11.6	Re-evaluation - Decreased N & Ri
Crossfield Rundle E	162.0	183.0	+21.0	Re-evaluation - Increased Ri
Crossfield Rundle Q	18.0	9.0	-9.0	Re-evaluation - Decreased Ri
Crossfield Second White Specks A	50.0	60.4	+10.4	Re-evaluation - Increased N & Ri
Crossfield East Elkton D	378.0	356.0	-22.0	Re-evaluation - Decreased Ri
Crossfield East Elkton I	73.8	24.6	-49.2	Re-evaluation - Decreased Ri
Crossfield East Ellerslie A	17.0	10.9	-6.1	Re-evaluation - Decreased Ri
Crystal Belly River A	9.7	4.9	-4.8	Re-evaluation - Decreased Ri
Crystal Viking H	140.0	158.0	+18.0	Re-evaluation - Decreased N & Increased Ri
Culp Wabamun D	31.6	30.4	-1.2	Re-evaluation - Decreased Ri
Culp Wabamun I	32.4	26.3	-6.1	Re-evaluation - Decreased Ri
Cygnat Ellerslie Y	8.9	0.0	-8.9	Delete - No Oil Production
Cygnat Viking G	36.8	35.6	-1.2	Re-evaluation - Decreased Ri
Cyn-Pem Belly River C				
Primary	83.0	111.0	+28.0	Re-evaluation - Increased Ri
Cyn-Pem Cardium A				
Water Flood	2240.0	2304.0	+64.0	Re-evaluation - Increased Ri
Cyn-Pem Cardium M	22.1	19.1	-3.0	Re-evaluation - Decreased Ri
Cyn-Pem Cardium O				
Gas Flood	270.0	315.0	+45.0	Re-evaluation - Increased Ri
Cyn-Pem Cardium U	14.5	13.0	-1.5	Re-evaluation - Decreased Ri
Cyn-Pem Rock Creek I	1.3	0.7	-0.6	Re-evaluation - Decreased Ri
Cyn-Pem Rock Creek W	Conf	2.9		
Cyn-Pem Viking A	11.2	202.0	+190.8	Pool Development - Increased N & Ri
Davey Belly River F	42.9	34.3	-8.6	Re-evaluation - Decreased Ri
Davey Pekisko C	9.2	3.9	-5.3	Re-evaluation - Decreased Ri
Davison Woodbend A	9.6	20.1	+10.5	Re-evaluation - Increased N & Ri
Dawson Granite Wash F	Conf	6.7		
Dawson Slave Point F	9.1	12.0	+2.9	Resumed Production Operations
Dawson Slave Point J	79.5	58.3	-21.2	Re-evaluation - Decreased Ri

\* Year-end Review Pools

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Dawson Slave Point K	26.9	23.1	-3.8	Re-evaluation - Decreased N & Ri
Dawson Slave Point M	180.0	287.0	+107.0	Re-evaluation - Increased N & Ri
Dawson Slave Point N	355.0	400.0	+45.0	Re-evaluation - Increased Ri
Dawson Slave Point P	29.0	36.9	+7.9	Re-evaluation - Increased Ri
Dawson Slave Point Q	52.5	118.0	+65.5	Pool Development - Increased N & Ri
Dawson Slave Point S	129.0	32.1	-96.9	Re-evaluation - Decreased N & Ri
Dawson Slave Point U	34.9	38.4	+3.5	Re-evaluation - Increased Ri
Dawson Slave Point Y	135.0	645.0	+510.0	Re-evaluation - Increased N & Decreased Ri
Dawson Slave Point Z	Conf	32.4		
Dawson Slave Point AA & Granite Wash E	Conf	25.3		
Dawson Slave Point BB	Conf	11.1		
Dawson Slave Point CC	Conf	50.5		
Dawson Woodbend A	Conf	9.6		
Doe Doig A	60.0	162.0	+102.0	Pool Development - Increased N
Doe Doig E	0.0	11.7	+11.7	
Dolce Cummings B	Conf	2.8		
Dolce Lloydminster C Water Flood	737.0	947.0	+210.0	Re-evaluation - Increased Ri
Donalda Upper Mannville O	2.0	4.0	+2.0	Re-evaluation - Decreased Ri
Drumheller D-2 D	0.0	8.7	+8.7	New Pool
Drumheller Lower Mannville U	0.3	2.6	+2.3	Resumed Production Operations
Drumheller Lower Mannville BB	2.7	0.1	-2.6	Re-evaluation - Decreased N & Ri
Drumheller Lower Mannville II	0.0	4.7	+4.7	
Drumheller Mannville F	9.0	13.7	+4.7	Resumed Production Operations
Drumheller Mannville I	276.0	421.0	+145.0	Re-evaluation - Decreased N & Increased Ri
Drumheller Mannville K	0.2	0.0	-0.2	Coalesced Drumheller Mannville I & K
Drumheller Upper Mannville II	0.0	13.2	+13.2	
Drumheller Upper Mannville JJ	0.0	4.0	+4.0	
Duhamel Basal Quartz J	3.6	0.1	-3.5	Delete Pool
Duhamel Basal Quartz O	0.0	11.6		
Dunvegan Charlie Lake A	37.4	15.0	-22.4	Re-evaluation - Decreased N & Ri
Dunvegan Debolt CC	Conf	11.6		

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Dyberg Ellerslie E	0.0	9.0	+9.0	
Eaglesham Belloy C	Conf	6.7		
Eaglesham North D-1 C	44.1	48.8	+4.7	Resumed Production Operations
Eaglesham North D-1 E	43.9	55.3	+11.4	Re-evaluation - Increased Ri
Eaglesham North D-1 F	59.7	53.7	-6.0	Re-evaluation - Decreased Ri
Eaglesham North D-1 N	29.7	21.5	-8.2	Re-evaluation - Decreased Ri
Eaglesham North D-1 O	14.2	12.4	-1.8	Re-evaluation - Decreased Ri
Earring Charlie Lake F	0.0	3.4		
Edberg Belly River C	Conf	11.3		
Edgerton Lloydminster A	6.1	7.6	+1.5	Resumed Production Operations
Edgerton Lloydminster F	20.9	25.1	+4.2	Re-evaluation - Increased Ri
Edgerton Lloydminster G	47.2	43.5	-3.7	Re-evaluation - Decreased N
Edson Cardium B				
Primary	32.8	35.5	+2.7	Re-evaluation - Increased Ri
Water Flood	430.3	406.4	-23.9	Re-evaluation - Decreased Ri
Edson Cardium E	18.9	7.1	-11.8	Re-evaluation - Decreased Ri
Edson Cardium T	7.3	0.0	-7.3	Coalesced Edson Cardium T, RR & ZZ Pools
Edson Cardium TT	9.0	0.0	-9.0	Coalesced Edson Cardium TT, RR & ZZ Pools
Edson Cardium MMM	0.0	6.8	+6.8	New Pool - previously in Edson Cardium RR & ZZ Pool
Elmworth Charlie Lake H	0.0	12.5	+12.5	
Elmworth Dunvegan B	67.6	26.8	-40.8	Re-evaluation - Decreased N & Ri
Elmworth Dunvegan P	0.0	15.2		
Elnora Nisku A	73.0	36.5	-36.5	Re-evaluation - Decreased Ri
Enchant Arcs I	73.8	126.0	+52.2	Re-evaluation - Increased Ri
Enchant Arcs J & VV				
Primary	394.0	59.3	-334.7	Re-evaluation - Decreased N
Water Flood	1272.0	1830.0	+558.0	Re-evaluation - Increased N
Enchant Arcs K & V	91.5	194.0	+26.0	Coalesced Enchant Arcs M, AA, K & V Pools
Enchant Arcs L & BB	21.2	79.0	+26.2	Coalesced Enchant Arcs L & BB, Arcs LLL & Arcs RR & SS Pools
Enchant Arcs P & R				
Primary	42.6	21.3	-21.3	Re-evaluation - Decreased N
Water Flood	433.0	443.0	+10.0	Re-evaluation - Increased N
Enchant Arcs T	15.2	6.8	-8.4	Re-evaluation - Decreased N & Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Enchant Area FF & GG				
Primary	75.0	5.5	-69.5	Re-evaluation - Decreased N
Water Flood	1350.0	1475.0	+125.0	Re-evaluation - Increased N
Enchant Area MM & NN				
Water Flood	179.0	209.0	+30.0	Re-evaluation - Increased Ri
Enchant Area AAA				
Primary	377.0	216.0	-161.0	Re-evaluation - Decreased N
Water Flood	0.0	322.0	+322.0	Enhanced Recovery Recognition
Enchant Ellis C	454.0	488.0	+34.0	Re-evaluation - Increased N & Ri
Enchant Ellis V				
Primary	19.4	22.7	+3.3	Re-evaluation - Increased Ri
Enchant Sunburst J	11.5	0.3	-11.2	Re-evaluation - Decreased N & Ri
Enchant Sunburst K	14.3	1.6	-12.7	Pool Abandoned
Enchant Upper Mannville BB	32.6	16.3	-16.3	Re-evaluation - Decreased N
Enchant Upper Mannville HHH	27.2	41.6	+14.4	Pool Development - Increased N
Erskine Blairmore X	9.0	6.4	-2.6	Re-evaluation - Decreased N & Ri
Erskine D-2	45.9	50.5	+4.6	Re-evaluation - Increased Ri
Erskine Glauconitic F	10.1	4.1	-6.0	Re-evaluation - Decreased N & Ri
Erskine Glauconitic I	7.5	1.3	-6.2	Re-evaluation - Decreased N & Ri
Esther Bakken U	95.4	31.8	-63.6	Re-evaluation - Decreased N & Ri
Esther Upper Mannville Y	5.1	20.9	+15.8	Re-evaluation - Increased N & Ri
Evi Gilwood B	120.0	135.0	+15.0	Re-evaluation - Increased Ri
Evi Gilwood J	71.4	61.9	-9.5	Pool Abandoned
Evi Gilwood O	60.8	57.8	-3.0	Re-evaluation - Decreased Ri
Evi Gilwood X & Granite Wash R	91.5	54.9	-36.6	Re-evaluation - Decreased Ri
Evi Gilwood Y	18.0	12.9	-5.1	Re-evaluation - Decreased Ri
Evi Gilwood GG	93.3	31.0	-62.3	Re-evaluation - Decreased N & Ri
Evi Gilwood HH	11.7	3.4	-8.3	Re-evaluation - Decreased N & Ri
Evi Gilwood II	85.2	28.4	-56.8	Re-evaluation - Decreased Ri
Evi Gilwood JJ	21.7	40.6	+18.9	Re-evaluation - Increased N & Ri
Evi Gilwood KK	2.4	3.9	+1.5	Re-evaluation - Increased N & Decreased Ri
Evi Granite Wash K & Gilwood V	60.6	22.2	-38.4	Re-evaluation - Decrease Ri
Evi Granite Wash S	5.1	10.4	+5.3	Re-evaluation - Increased Ri
Evi Granite Wash T	10.1	3.6	-6.5	Re-evaluation - Decreased N & Ri
Evi Granite Wash DD	30.3	48.4	+18.1	Re-evaluation - Increased Ri

\* Year-end Review Pools

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# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Evi Granite Wash EE	33.0	16.5	-16.5	Re-evaluation - Decreased Ri
Evi Granite Wash QQ	3.4	5.6	+2.2	Re-evaluation - Increased N & Decreased Ri
Evi Granite Wash SS	5.2	6.5	+1.3	Resumed Production Operations
Evi Granite Wash UU	35.6	17.8	-17.8	Re-evaluation - Decreased N
Evi Granite Wash VV	16.7	4.2	-12.5	Re-evaluation - Decreased N
Evi Granite Wash WW	11.6	2.2	-9.4	Re-evaluation - Decreased N & Ri
Evi Granite Wash BBB	Conf	4.9		
Evi Granite Wash CCC	Conf	10.1		
Evi Granite Wash DDD	12.8	3.8	-9.0	Re-evaluation - Decreased N & Ri
Evi Granite Wash EEE	Conf	25.0		
Evi Slave Point K	70.5	56.4	-14.1	Re-evaluation - Decreased Ri
Evi Slave Point S	27.6	36.8	+9.2	Re-evaluation - Increased Ri
Evi Slave Point W	21.9	6.3	-15.6	Pool Abandoned
Ewing Lake D-3 C	19.7	0.7	-19.0	Re-evaluation - Decreased N & Ri
Ewing Lake Ellerslie A	Conf	14.1		
Fairydell-Bon Accord D-2 A	186.0	149.0	-37.0	Re-evaluation - Decreased Ri
Fairydell-Bon Accord D-2 C	20.2	5.1	-15.1	Re-evaluation - Decreased N & Ri
Farrow Basal Quartz I	8.1	12.1	+4.0	Re-evaluation - Increased Ri
Farrow Basal Quartz L	6.7	0.2	-6.5	Delete Pool
Farrow Basal Quartz N	5.6	1.8	-3.8	Re-evaluation - Decreased N & Ri
Farrow Glauconitic A	6.5	3.1	-3.4	Re-evaluation - Decreased Ri
Farrow Glauconitic B	4.8	3.2	-1.6	Pool Abandoned
Farrow Glauconitic F	5.8	0.1	-5.7	Re-evaluation - Decreased N & Ri
Farrow Lower Mannville A	2.4	0.1	-2.3	Re-evaluation - Decreased Ri
Fenn West D-2 A	1735.0	1793.0	+58.0	Re-evaluation - Increased Ri
Fenn West D-2 C	104.0	69.0	-35.0	Re-evaluation - Decreased Ri
Fenn-Big Valley D-2 D				
Primary	126.0	130.0	+4.0	Re-evaluation - Increased N & Decreased Ri
Water Flood	230.0	220.0	-10.0	Re-evaluation - Decreased Ri
Fenn-Big Valley Upper Mannville K	45.0	98.4	+53.4	Re-evaluation - Increased N & Ri
Ferrier Belly River L	4.8	0.2	-4.6	Re-evaluation - Decreased N & Ri
Ferrier Cardium F	9.5	0.8	-8.7	Re-evaluation - Decreased N & Ri
Ferrier Cardium VV	6.8	0.2	-6.6	Re-evaluation - Decreased N & Ri

\* Year-end Review Pools

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**ATTACHMENT I**

**1999 RESERVE CHANGES**  
**Initial Established Crude Oil Reserves**  
**at 31 December**

<b>Pool</b>	<b>1998 10<sup>3</sup>m<sup>3</sup></b>	<b>1999 10<sup>3</sup>m<sup>3</sup></b>	<b>Change 10<sup>3</sup>m<sup>3</sup></b>	<b>Reason for Change</b>
Ferrier Elkton H	10.1	62.1	+52.0	Pool Development - Increased N
Ferrybank Banff D	9.2	5.7	-3.5	Re-evaluation - Decreased Ri
Ferrybank Glauconitic Q	0.0	6.5	+6.5	
Fir Cardium D	16.5	19.1	+2.6	Re-evaluation - Increased Ri
Fir Cardium E	8.5	1.6	-6.9	Re-evaluation - Decreased N & Ri
Fire Keg River E	41.2	46.0	+4.8	Resumed Production Operations
Fire Sulphur Point C	88.2	48.5	-39.7	Re-evaluation - Decreased Ri
Fox Creek Gething D & H	23.0	12.0	-11.0	Re-evaluation - Decreased Ri
Gadsby Mannville BB	2.0	23.3	+21.3	Establish Oil Reserves
Galahad Ellerslie O	11.5	0.1	-11.4	Pool Abandoned
Garrington Cardium P	2.7	4.1	+1.4	Re-evaluation - Increased Ri
Garrington Leduc H	Conf	134.0		
Garrington Lower Mannville CC, DD & EE	12.0	6.1	-5.9	Re-evaluation - Decreased N & Increased Ri
Garrington Lower Mannville BBB	5.2	1.6	-3.6	Re-evaluation - Decreased N & Ri
Garrington Lower Mannville SSS	2.0	0.8	-1.2	Re-evaluation - Decreased Ri
Garrington Lower Mannville B2B	Conf	3.1		
Garrington Lower Mannville C2C	0.0	9.0	+9.0	
Garrington Lower Mannville D2D	0.0	5.8	+5.8	New Pool - previously in Garrington Mannville R & Lower Mannville ZZ
Garrington Mannville I	200.0	160.0	-40.0	Re-evaluation - Decreased Ri
Garrington Mannville R & Lower Mannville ZZ	11.6	0.0	-11.6	Delete Oil Reserves
Garrington Mannville V	0.0	2.7	+2.7	
Garrington Second White Specks C	1.3	5.3	+4.0	Resumed Production Operations
Garrington Viking A	870.0	977.0	+107.0	Pool Development - Decreased N & Increased Ri
Garrington Viking L	5.9	7.9	+2.0	Resumed Production Operations
Garrington Viking Q	215.0	143.0	-72.0	Re-evaluation - Decreased Ri
Garrington Viking Y	0.2	1.8	+1.6	Re-evaluation - Increased Ri
Garrington Viking CC & Mannville B	740.0	808.0	+68.0	Re-evaluation - Increased N
Garrington Viking CC, Mannville B & Lower Mannville VVV	9.4	0.0	-9.4	Garrington Lower Mannville VVV pool commingled with Viking CC & Mannville B Pools
Garrington Viking EE	0.0	6.2	+6.2	
Ghost Pine Pekisko F	14.3	16.5	+2.2	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Ghost Pine Upper Mannville Q, Y & FF	24.9	18.5	-6.4	Re-evaluation - Decreased Ri
Ghost Pine Upper & Lower Mannville MU No. 1	45.1	50.8	+5.7	Re-evaluation - Increased Ri
Ghost Pine Upper Mannville FFF & KKK	5.7	9.0	+3.3	Resumed Production Operations
Ghost Pine Upper Mannville H4H	5.5	2.0	-3.5	Re-evaluation - Decreased Ri
Ghost Pine Upper Mannville S4S	23.8	6.0	-17.8	Re-evaluation - Decreased N & Ri
Gift Gilwood K	57.9	113.0	+55.1	Pool Development - Increased N
Gift Gilwood N	8.2	14.8	+6.6	Resumed Production Operations
Gift Gilwood O	39.3	31.4	-7.9	Re-evaluation - Decreased Ri
Gift Gilwood R	36.8	11.5	-25.3	Re-evaluation - Decreased N
Gift Gilwood T	15.3	7.7	-7.6	Re-evaluation - Decreased N
Gift Gilwood V	20.5	5.1	-15.4	Re-evaluation - Decreased N & Ri
Gift Gilwood W	78.8	94.5	+15.7	Re-evaluation - Increased Ri
Gift Gilwood X	26.4	67.6	+41.2	Pool Development - Increased N
Gift Gilwood Z	15.9	3.2	-12.7	Re-evaluation - Decreased N & Ri
Gift Gilwood EE	Conf	34.5		
Gift Gilwood FF	Conf	14.8		
Gift Gilwood GG	Conf	73.4		
Gift Gilwood HH	Conf	7.1		
Gift Granite Wash D	4.8	7.2	+2.4	Resumed Production Operations
Gift Slave Point H	23.6	35.4	+11.8	Re-evaluation - Increased Ri
Gift Slave Point M	0.0	7.3	+7.3	
Gift Slave Point M & Gilwood FF	7.3	7.4	-14.7	Pools Commingled
Gilby Basal Mannville A & Jurassic D	600.0	697.0	+97.0	Re-evaluation - Decreased N & Increased Ri
Gilby Basal Mannville R	170.0	110.0	-60.0	Re-evaluation - Decreased N & Increased Ri
Gilby Basal Mannville S	34.5	44.0	+9.5	Re-evaluation - Decreased N & Increased Ri
Gilby Basal Mannville DD	10.5	5.0	-5.5	Re-evaluation - Decreased Ri
Gilby Basal Mannville EE	14.2	0.0	-14.2	Coalesced Basal Mannville EE, Basal Mannville A & Jurassic D
Gilby Basal Mannville UU	62.4	31.2	-31.2	Re-evaluation - Decreased Ri
Gilby Basal Mannville VVV	0.0	8.7	+8.7	
Gilby Belly River E	15.0	21.4	+6.4	Re-evaluation - Increased Ri
Gilby D-3 B	45.6	5.5	-40.1	Re-evaluation - Decreased N & Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place



# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Gilby Jurassic Q	8.6	13.7	+5.1	Re-evaluation - Increased Ri
Gilby Jurassic U	17.3	0.3	-17.0	Re-evaluation - Decreased N & Ri
Gilby Jurassic W	0.0	28.0	+28.0	
Gilby Rundle O	8.2	0.0	-8.2	Coalesced Willesden Green Pekisko A & Gilby Rundle O
Gilby Rundle V	8.1	0.2	-7.9	Re-evaluation - Decreased N & Ri
Gilby Second White Specks A	455.0	379.0	-76.0	Re-evaluation - Decreased Ri
Gilby Second White Specks G	0.0	8.2	+8.2	
Gilby Upper Mannville J Water Flood	813.0	1300.0	+487.0	Re-evaluation - Increased Ri
Gilby Upper Mannville Q	7.3	0.2	-7.1	Re-evaluation - Decreased N & Ri
Gilby Viking F	15.0	12.8	-2.2	Re-evaluation - Decreased Ri
Gilwood Gilwood A	111.0	105.9	-5.1	Re-evaluation - Decreased Ri
Gilwood Gilwood C	54.2	27.3	-26.9	Re-evaluation - Decreased N & Ri
Giroux Lake Viking D	27.0	32.4	+5.4	Re-evaluation - Increased Ri
Giroux Lake Viking H	Conf	12.6		
Girouxville East Beaverhill Lake B Water Flood	Conf	193.0		Enhanced Recovery Recognition
Girouxville East Gilwood D	Conf	15.2		
Gladys Lower Mannville A	60.0	65.0	+5.0	Re-evaluation - Increased Ri
Gladys Lower Mannville G	10.8	1.1	-9.7	Re-evaluation - Decreased N & Ri
Gladys Lower Mannville I	16.2	3.2	-13.0	Re-evaluation - Decreased Ri
Gladys Rundle F	9.4	1.0	-8.4	Re-evaluation - Decreased N & Ri
Gladys Turner Valley D	15.6	0.4	-15.2	Re-evaluation - Decreased N & Ri
Gladys Upper Mannville A	4.6	1.1	-3.5	Re-evaluation - Decreased N & Ri
Gladys Viking A	7.4	2.9	-4.5	Re-evaluation - Decreased Ri
Gold Creek Charlie Lake G	10.8	1.1	-9.7	Re-evaluation - Decreased N & Ri
Gold Creek Charlie Lake H	21.2	5.3	-15.9	Re-evaluation - Decreased N
Gold Creek Doig C	2.7	5.9	+3.2	Re-evaluation - Increased Ri
Gold Creek Gething B	5.8	0.2	-5.6	Re-evaluation - Decreased N & Ri
Gold Creek Halfway A	3.8	0.3	-3.5	Re-evaluation - Decreased Ri
Golden Slave Point A	2900.0	2992.0	+92.0	Re-evaluation - Increased N & Ri
Golden Spike Blairmore T	Conf	16.8		
Golden Spike D-1 C	6.0	1.0	-5.0	Re-evaluation - Decreased N & Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Golden Spike D-1 D	Conf	4.7		
Golden Spike D-2 A Water Flood	371.0	337.0	-34.0	Re-evaluation - Decreased Ri
Golden Spike D-3 B	273.0	294.0	+21.0	Re-evaluation - Increased Ri
Golden Spike D-3 C	213.0	237.0	+24.0	Pool Development - Increased N & Decreased Ri
Goose River Beaverhill Lake A Solvent Flood Water Flood	6256.0 3705.0	6521.0 3480.0	+265.0 -225.0	Re-evaluation - Increased N Re-evaluation - Decreased N
Goose River Beaverhill Lake B	16.7	13.9	-2.8	Re-evaluation - Decreased Ri
Gordondale Doig B	20.3	6.1	-14.2	Re-evaluation - Decreased Ri
Gordondale Doig D	14.9	6.0	-8.9	Re-evaluation - Decreased Ri
Grand Forks Lower Mannville D Primary Water Flood	60.3 6230.0	121.0 6854.0	+60.7 +624.0	Re-evaluation - Increased Ri Re-evaluation - Increased Ri
Grand Forks Lower Mannville X	1.8	0.0	-1.8	Coalesced Lower Mannville X, WW & Upper Mannville H Pools
Grand Forks Lower Mannville MM Water Flood	2175.0	2393.0	+218.0	Re-evaluation - Increased Ri
Grand Forks Lower Mannville QQ	0.2	0.9	+0.7	Coalesced Grand Forks Lower Mannville NN & QQ Pools
Grand Forks Sawtooth O	1772.0	1904.0	+132.0	Re-evaluation - Increased Ri
Grand Forks Sawtooth NN Primary Water Flood	75.5 279.0	114.0 313.0	+38.5 +34.0	Re-evaluation - Increased N & Decreased Ri Re-evaluation - Increased Ri
Grand Forks Sawtooth VV	266.0	294.0	+28.0	Re-evaluation - Increased N
Grand Forks Sawtooth WW Water Flood	2347.0	2530.0	+183.0	Re-evaluation - Increased N
Grand Forks Sawtooth HHH	79.5	53.0	-26.5	Re-evaluation - Decreased Ri
Grand Forks Sawtooth QQQ	153.0	217.0	+37.0	Pool Development - Increased N & Ri
Grand Forks Sawtooth C2C	120.0	147.0	+27.0	Pool Development - Increased N
Grand Forks Sawtooth F2F	125.0	133.0	+8.0	Re-evaluation - Increased Ri
Grand Forks Sawtooth V2V	38.7	51.6	+12.9	Re-evaluation - Increased N
Grand Forks Sawtooth Z2Z	0.0	21.0	+21.0	Pool transferred from H.C.
Grand Forks Sawtooth Z2Z	21.0	0.0	-21.0	Pool Transferred to L & M
Grand Forks Upper Mannville H	39.2	0.0	-39.2	Coalesced Lower Mannville X, WW & Upper Mannville H Pools
Grand Forks Upper Mannville I	11.0	24.2	+13.2	Re-evaluation - Increased Ri
Grande Prairie Charlie Lake I	13.1	0.2	-12.9	Re-evaluation - Decreased N & Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Grande Prairie Halfway A				
Primary	90.3	4.2	-86.1	Re-evaluation - Decreased N & Ri
Gas Flood	735.0	943.0	+208.0	Re-evaluation - Increased N & Ri
Grande Prairie Halfway N	1.5	8.5	+7.0	Pool Development - Increased N
Grande Prairie Halfway P	8.9	3.0	-5.9	Re-evaluation - Decreased N & Ri
Grande Prairie Halfway U	68.9	0.0	-68.9	Coalesced Grande Prairie Halfway U & V Pools
Grande Prairie Halfway Y	26.3	45.6	+19.3	Re-evaluation - Increased N
Grande Prairie Halfway Z	0.0	52.4	+52.4	New Pool - previously part of Grande Prairie Halfway A
Groat Cardium D	18.6	4.7	-13.9	Re-evaluation - Decreased N & Ri
Groat Cardium D	Conf	4.7		
Groat Cardium E	0.0	23.8	+23.8	
Halkirk Camrose C	15.0	11.7	-3.3	Re-evaluation - Decreased Ri
Halkirk Glauconitic F	35.0	41.9	+6.9	Re-evaluation - Increased Ri
Halkirk Lower Mannville F	116.0	47.3	-68.7	Re-evaluation - Decreased N & Increased Ri
Halkirk Lower Mannville G	6.4	59.0	+52.6	Re-evaluation - Increased N & Decreased Ri
Halkirk Lower Mannville M	11.5	4.7	-6.8	Re-evaluation - Decreased N & Ri
Halkirk Lower Mannville R	10.7	0.1	-10.6	Re-evaluation - Decreased N & Ri
Halkirk Lower Mannville T	3.5	0.5	-3.0	Re-evaluation - Decreased N & Ri
Halkirk Upper Mannville B	17.4	11.1	-6.3	Re-evaluation - Decreased N & Ri
Halkirk Upper Mannville D				
Primary	14.2	0.0	-14.2	Delete Primary Reserves
Water Flood	960.0	1000.0	+40.0	Re-evaluation - Increased N
Halkirk Upper Mannville K	48.5	54.9	+6.4	Re-evaluation - Increased Ri
Halkirk Upper Mannville N	57.6	155.0	+97.4	Pool Development - Increased N & Decreased Ri
Halkirk East Ellerslie B	329.0	425.0	+96.0	Re-evaluation - Increased N
Halkirk East Ellerslie H	13.0	8.8	-4.2	Re-evaluation - Decreased Ri
Halkirk East Ellerslie T	8.3	3.9	-4.4	Re-evaluation - Decreased Ri
Halkirk East Ellerslie AA	13.6	2.2	-11.4	Re-evaluation - Decreased N & Ri
Halkirk East Ellerslie FF	Conf	28.2		
Halkirk East Glauconitic Q	21.4	6.4	-15.0	Re-evaluation - Decreased Ri
Halkirk East Glauconitic U	0.0	9.1	+9.1	
Halkirk East Lloydminster A, Glauconitic H & Ellerslie C	3.5	7.0	+3.5	Pools Commingled
Halkirk East Viking J	Conf	5.2		

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

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RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT J

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Halkirk East Viking L	0.0	5.1	+5.1	
Hamburg Slave Point M	Conf	63.0		
Harmattan East Ellerslie D	0.0	15.3	+15.3	
Harmattan East Lower Mannville A	7.9	13.1	+5.2	Re-evaluation - Increased Ri
Harmattan East Rundle Primary	288.0	361.0	+73.0	Re-evaluation - Increased Ri
Harmattan East Viking E Primary	118.0	142.0	+24.0	Re-evaluation - Increased Ri
Harmattan-Elkton Rundle C	11960.0	12560.0	+600.0	Re-evaluation - Increased Ri
Haynes D-2 C	164.0	117.0	-47.0	Re-evaluation - Decreased Ri
Hays Arca O & Z	2.8	6.2	+3.4	Resumed Production Operations
Hays Arca W & X	6.0	17.9	+11.9	Re-evaluation - Increased Ri
Hays Lower Mannville M Water Flood	280.0	301.0	+21.0	Re-evaluation - Increased Ri
Hays Sawtooth B	1189.0	1288.0	+99.0	Re-evaluation - Increased Ri
Hays Sawtooth C	610.0	640.0	+30.0	Re-evaluation - Increased Ri
Hays Sawtooth D	175.0	219.0	+44.0	Re-evaluation - Increased Ri
Hays Sawtooth F	200.0	225.0	+25.0	Re-evaluation - Increased Ri
Hays Sawtooth P	46.0	18.4	-27.6	Re-evaluation - Decreased N & Ri
Hayter Cummings A	62.4	0.0	-62.4	Coalesced Hayter Cummings A & Dina A Pools
Hayter Cummings B	29.5	54.5	+14.5	Coalesced Hayter Cummings B & G Pools
Hayter Cummings H	9.1	0.0	-9.1	Coalesced Hayter Cummings A & H Pools
Hayter Dina A Primary	1234.0	1481.0	+247.0	Re-evaluation - Increased Ri
Water Flood	3306.0	3674.0	+368.0	Re-evaluation - Increased Ri
Hayter Dina B	5389.0	6737.0	+1348.0	Re-evaluation - Increased Ri
Hayter Dina O	25.2	50.4	+25.2	Re-evaluation - Increased Ri
Hayter Dina Q	416.0	500.0	+84.0	Re-evaluation - Increased Ri
Hayter Sparky A Water Flood	348.0	370.0	+22.0	Re-evaluation - Increased Ri
Hayter Sparky Z	40.2	50.3	+10.1	Re-evaluation - Increased Ri
Hayter Sparky BB	0.0	2.1	+2.1	New Pool
Hector Lower Mannville C	7.5	0.6	-6.9	Pool Abandoned
Herronton Ellerslie B	3.0	0.2	-2.8	Pool Abandoned
Herronton Ellerslie E	Conf	10.1		

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

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RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Herronton Turner Valley B	117.0	140.0	+23.0	Re-evaluation - Increased Ri
Herronton Turner Valley K	64.0	32.0	-32.0	Re-evaluation - Decreased Ri
High Prairie Gilwood Q	Conf	6.0		
High River Wabamun A	10.5	16.0	+5.5	Resumed Production Operations
Highvale Banff E	13.9	19.4	+5.5	Re-evaluation - Increased Ri
Highvale Banff M	9.4	13.4	+4.0	Resumed Production Operations
Highvale Banff U	16.9	1.2	-15.7	Re-evaluation - Decreased N & Ri
Highvale Banff V	3.9	0.9	-3.0	Re-evaluation - Decreased N & Ri
Highvale Banff W	11.3	1.6	-9.7	Re-evaluation - Decreased N & Ri
Highvale Banff Y	Conf	15.3		
Highvale Cardium D	60.5	31.9	-28.6	Re-evaluation - Decreased N & Increased Ri
Highvale Lower Mannville S	2.8	5.1	+2.3	Resumed Production Operations
Highvale Lower Mannville U	60.5	43.6	-16.9	Re-evaluation - Decreased N
Holburn Upper Mannville A	Conf	7.5		
Homeglen-Rimbey Banff C	4.4	0.6	-3.8	Re-evaluation - Decreased N & Ri
Homeglen-Rimbey D-2 A	0.0	6.7	+6.7	
Homeglen-Rimbey D-3 D	29.0	1.8	-27.2	Re-evaluation - Decreased N & Ri
Homeglen-Rimbey Pekisko A	16.7	9.0	-7.7	Re-evaluation - Decreased N & Ri
Homeglen-Rimbey Pekisko C	21.8	67.2	+45.4	Pool Development - Increased N & Ri
Hotchkiss Gilwood I	11.9	6.3	-5.6	Re-evaluation - Decreased N & Ri
Hotchkiss Gilwood L	55.8	5.6	-50.2	Re-evaluation - Decreased N & Ri
Hussar Basal Mannville C	22.2	19.2	-3.0	Re-evaluation - Decreased Ri
Hussar Basal Mannville H	0.2	0.0	-0.2	Coalesced Hussar Basal Mannville H, J, O & GGG Pools
Hussar Basal Mannville I & Z	38.6	41.4	+2.8	Re-evaluation - Increased Ri
Hussar Basal Mannville N	25.4	25.0	-0.4	Re-evaluation - Decreased Ri
Hussar Basal Mannville QQ	5.7	1.6	-4.1	Re-evaluation - Decreased N & Ri
Hussar Basal Mannville UU	3.6	1.0	-2.6	Re-evaluation - Decreased N & Ri
Hussar Basal Quartz B	8.8	3.2	-5.6	Re-evaluation - Decreased N & Ri
Hussar Glauconitic U	100.0	131.0	+31.0	Re-evaluation - Increased N
Hussar Glauconitic SSS	117.0	129.0	+12.0	Re-evaluation - Increased Ri
Hussar Glauconitic W2W Water Flood	194.0	218.0	+24.0	Re-evaluation - Increased Ri
Hythe Halfway B	11.9	7.4	-4.5	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

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N - Initial Volume in Place



# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Iosegun Montney A	12.5	6.4	-6.1	Re-evaluation - Decreased Ri
Jayar Dunvegan B	28.0	35.0	+7.0	Re-evaluation - Increased Ri
Jenner Pekisko G	25.7	20.1	-5.6	Pool Abandoned
Jenner Upper Mannville F	723.0	904.0	+181.0	Re-evaluation - Increased Ri
Jenner Upper Mannville U	0.0	12.1	+12.1	Establish Oil Reserves
Jenner Upper Mannville V	13.4	26.7	+13.3	Re-evaluation - Increased Ri
Jenner Upper Mannville OO	420.0	1349.0	+929.0	Pool Development - Increased N & Ri
Jenner Upper Mannville DDD	109.0	127.0	+18.0	Re-evaluation - Increased Ri
Jenner Upper Mannville OOO	15.6	23.4	+7.8	Re-evaluation - Increased Ri
Jenner Upper Mannville PPP	26.9	35.9	+9.0	Re-evaluation - Increased N & Decreased Ri
Jenner Upper Mannville VVV	174.0	203.0	+29.0	Re-evaluation - Increased Ri
Jenner Upper Mannville K2K	Conf	12.7		
Jenner Upper Mannville L2L	Conf	59.4		
Joan Granite Wash C	81.0	84.6	+3.6	Re-evaluation - Increased Ri
Joffre Blaimore OO	0.0	7.8	+7.8	
Joffre Viking C	6.5	3.2	-3.3	Re-evaluation - Decreased N & Ri
Joffre Viking K	7.5	3.8	-3.7	Re-evaluation - Decreased Ri
Johnson Glauconitic C Water Flood	330.0	326.0	-4.0	Re-evaluation - Decreased N
Johnson Glauconitic L	0.0	9.3	+9.3	New Pool
Judy Creek South Beaverhill Lake Primary Water Flood	97.4 518.0	173.0 583.0	+75.6 +65.0	Pool Development - Increased N & Decreased Ri Re-evaluation - Increased Ri
Jumbush Upper Mannville H	80.0	88.0	+8.0	Re-evaluation - Increased Ri
Jumbush Upper Mannville I	192.0	240.0	+48.0	Re-evaluation - Increased Ri
Jumbush Upper Mannville N Water Flood	105.0	226.0	+121.0	Re-evaluation - Increased N & Ri
Jumbush Upper Mannville O	15.0	12.4	-2.6	Re-evaluation - Decreased Ri
Jumbush Upper Mannville T	19.4	1.0	-18.4	Re-evaluation - Decreased N & Ri
Jumbush Upper Mannville U	20.4	10.2	-10.2	Re-evaluation - Decreased Ri
Kakwa C Cardium A	66.6	73.0	+6.4	Re-evaluation - Increased Ri
Kakwa Halfway A	Conf	27.9		
Kakwa Halfway B	Conf	19.4		
Karr Dunvegan E	8.7	0.3	-8.4	Re-evaluation - Decreased N & Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Karr Nikanassin C	4.7	0.4	-4.3	Re-evaluation - Decreased N & Ri
Kaybob Beaverhill Lake D	4.8	2.3	-2.5	Re-evaluation - Decreased N & Ri
Kaybob Gething LL	0.0	12.2	+12.2	
Kaybob Nisku D	41.2	7.2	-34.0	Re-evaluation - Decreased N & Ri
Kaybob Triassic C	22.3	6.3	-16.0	Re-evaluation - Decreased N & Ri
Kaybob Triassic D	8.5	0.6	-7.9	Re-evaluation - Decreased N & Ri
Kaybob Triassic F	0.0	3.8	+3.8	
Kaybob South Dunvegan H	3.6	0.2	-3.4	Pool Abandoned
Kaybob South Nisku C	70.2	62.6	-7.6	Re-evaluation - Decreased Ri
Kaybob South Second White Specks B	20.4	6.8	-13.6	Re-evaluation - Decreased N & Ri
Keho Bow Island F	27.6	30.4	+2.8	Re-evaluation - Increased Ri
Kidney Keg River C	632.0	496.0	-136.0	Re-evaluation - Increased N & Decreased Ri
Kidney Keg River D	41.0	46.4	+5.4	Re-evaluation - Increased Ri
Kidney Keg River I	72.0	66.4	-5.6	Re-evaluation - Decreased Ri
Kidney Keg River I	66.4	72.0	+5.6	Re-evaluation - Increased Ri
Kidney Keg River GG	4.8	3.7	-1.1	Pool Abandoned
Kidney Keg River HH	9.4	3.3	-6.1	Pool Abandoned
Kidney Keg River QQ	67.0	38.2	-28.8	Re-evaluation - Increased N & Decreased Ri
Kidney Keg River TT	32.3	38.5	+6.2	Re-evaluation - Increased Ri
Kidney Keg River JJJ	10.9	9.0	-1.9	Re-evaluation - Decreased Ri
Kidney Keg River UUU	35.8	21.5	-14.3	Re-evaluation - Decreased Ri
Kidney Keg River VVV	11.9	6.2	-5.7	Re-evaluation - Decreased N & Increased Ri
Kidney Keg River XXX	36.2	45.3	+9.1	Re-evaluation - Increased Ri
Killam Ellerslie CC	24.1	26.8	+2.7	Re-evaluation - Increased Ri
Killam Ellerslie JJ	11.3	10.0	-1.3	Pool Abandoned
Killam Ellerslie YY	Conf	5.6		
Killam Glauconitic FF	1985.0	2073.0	+88.0	Re-evaluation - Increased Ri
Kitty Slave Point A	16.3	27.6	+11.3	Resumed Production Operations
Kitty Slave Point A	34.5	16.3	-18.2	Re-evaluation - Decreased Ri
Knappen Lower Mannville I	Conf	4.5		
Knopcik Charlie Lake B	13.6	11.7	-1.9	Re-evaluation - Decreased Ri
Knopcik Charlie Lake I	0.0	6.6	+6.6	

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Knopcik Charlie Lake I	6.6	1.0	-5.6	Pool Abandoned
Knopcik Halfway O	Conf	6.9		
La Glace Halfway B	28.4	8.5	-19.9	Re-evaluation - Decreased N & Ri
La Glace Halfway D	5.3	1.9	-3.4	Re-evaluation - Decreased N & Ri
La Glace Halfway F	12.8	1.0	-11.8	Re-evaluation - Decreased N & Ri
La Glace Montney A	79.3	47.0	-32.3	Re-evaluation - Increased N & Decreased Ri
Lacombe Nisku C	66.3	92.8	+26.5	Re-evaluation - Increased Ri
Lacombe Nisku G	10.1	4.4	-5.7	Re-evaluation - Decreased N & Ri
Lanaway Cardium	292.0	243.0	-49.0	Re-evaluation - Increased N & Decreased Ri
Lanaway Elkton B	35.5	0.5	-35.0	Re-evaluation - Decreased N & Ri
Lanaway Elkton C	11.5	2.3	-9.2	Pool Abandoned
Lanaway Jurassic-Rundle A	68.1	64.1	-4.0	Re-evaluation - Decreased N & Ri
Lanaway Mannville F	0.3	3.4	+3.1	Resumed Production Operations
Lanaway Pekisko D	21.2	7.1	-14.1	Re-evaluation - Decreased N & Ri
Lanaway Viking B	9.9	8.4	-1.5	Re-evaluation - Decreased Ri
Larne Keg River K	59.6	54.9	-4.7	Re-evaluation - Decreased Ri
Larne Keg River V	21.4	13.2	-8.2	Re-evaluation - Decreased N & Increased Ri
Larne Keg River FF	7.0	4.1	-2.9	Re-evaluation - Decreased N & Increased Ri
Larne Keg River HH	25.5	22.6	-2.9	Re-evaluation - Decreased Ri
Larne Keg River LL	26.0	19.2	-6.8	Re-evaluation - Decreased N & Ri
Larne Keg River MM	10.6	7.5	-3.1	Re-evaluation - Decreased N & Increased Ri
Larne Keg River OO	13.1	10.1	-3.0	Re-evaluation - Decreased N & Increased Ri
Larne Keg River PP	25.0	13.6	-11.4	Pool Abandoned
Larne Keg River QQ	53.5	21.4	-32.1	Re-evaluation - Decreased Ri
Larne Keg River VV	14.0	4.5	-9.5	Re-evaluation - Decreased Ri
Larne Keg River WW	Conf	9.1		
Lathom Lower Mannville F	0.0	1.0	+1.0	
Lathom Lower Mannville G	0.0	7.1	+7.1	
Leahurst Glauconitic B Primary	43.3	0.0	-43.3	Delete Primary Reserves
Leahurst Glauconitic E	4.9	10.8	+5.9	Re-evaluation - Increased N & Ri
Leahurst Mannville OO	2.6	0.8	-1.8	Re-evaluation - Decreased N & Ri
Leaman Lower Mannville G	35.9	51.3	+15.4	Re-evaluation - Decreased N & Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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N - Initial Volume in Place



# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Leaman Nordegg C	160.0	121.0	-39.0	Re-evaluation - Decreased N & Ri
Leaman Nordegg E	8.6	43.0	+34.4	Pool Development - Increased N & Ri
Leaman Nordegg G	0.0	5.1	+5.1	
Leaman Rock Creek E	0.0	8.0	+8.0	
Leduc-Woodbend Blairmore A	281.0	290.0	+9.0	Re-evaluation - Increased Ri
Leduc-Woodbend Blairmore NN	9.9	3.7	-6.2	Re-evaluation - Decreased N & Ri
Leduc-Woodbend Blairmore RR	7.8	2.8	-5.0	Re-evaluation - Decreased N & Ri
Leduc-Woodbend Blairmore BBB	5.3	12.5	+7.2	Pool Development - Increased N
Leduc-Woodbend Blairmore FFF	11.9	2.0	-9.9	Re-evaluation - Decreased N & Ri
Leduc-Woodbend Blairmore GGG Water Flood	0.0	485.0		Enhanced Recovery Recognition
Leduc-Woodbend Blairmore QQQ	0.0	3.9	+3.9	
Leduc-Woodbend Blairmore RRR	0.0	7.3	+7.3	
Leduc-Woodbend Blairmore TTT	0.0	2.5	+2.5	
Leduc-Woodbend Blairmore VVV	0.0	15.0	+15.0	
Leduc-Woodbend D-1 A	29.9	60.0	+31.0	Coalesced Leduc-Woodbend D-1 A & D-1 F Pools
Leduc-Woodbend D-1 G	Conf	10.6		
Leduc-Woodbend D-2 B	3375.0	3340.0	-35.0	Re-evaluation - Decreased Ri
Leduc-Woodbend D-2 E	123.0	127.0	+4.0	Re-evaluation - Increased Ri
Leduc-Woodbend D-2 F	63.6	58.8	-4.8	Pool Abandoned
Leduc-Woodbend D-3 E	40.3	35.0	-5.3	Re-evaluation - Decreased N & Increased Ri
Leduc-Woodbend Glauconitic D	370.0	387.0	+10.2	Coalesced Leduc-Woodbend Glauconitic D & E Pools
Leduc-Woodbend Glauconitic F	36.4	18.2	-18.2	Re-evaluation - Decreased Ri
Leduc-Woodbend Glauconitic H	0.0	5.3	+5.3	
Leduc-Woodbend Upper Mannville B	0.0	48.1		
Leo Upper Mannville E	4.8	6.5	+1.7	Re-evaluation - Decreased N & Increased Ri
Little Bow Bow Island G, Upper Mannville BB & Lower Mannville T	88.9	109.0	+20.1	Pool Development - Increased N & Decreased Ri
Little Bow Upper Mannville L & Lower Mannville MM	27.7	39.6	+11.9	Re-evaluation - Increased Ri
Little Bow Upper Mannville Q	2.1	0.0	-2.1	Coalesced Little Bow Upper Mannville Q & R Pools
Little Bow Upper Mannville R	1.7	3.8	+2.1	Coalesced Little Bow Upper Mannville Q & R Pools
Little Bow Upper Mannville U Primary	0.0	5.7	+5.7	Declare Primary Reserves

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Little Bow Upper Mannville II	122.0	149.0	+27.0	Re-evaluation - Decreased N & Increased Ri
Little Bow Upper Mannville OO	8.1	6.4	-1.7	Pool Abandoned
Little Horse Gilwood A	6.9	3.8	-3.1	Pool Abandoned
Little Horse Gilwood C	80.5	47.9	-32.6	Re-evaluation - Decreased Ri
Little Horse Gilwood J	9.0	1.7	-7.3	Re-evaluation - Decreased N & Ri
Little Horse Gilwood L	167.0	95.2	-71.8	Re-evaluation - Decreased Ri
Little Horse Gilwood M	96.5	65.6	-30.9	Re-evaluation - Decreased Ri
Little Horse Gilwood N	283.0	311.0	+28.0	Re-evaluation - Increased Ri
Little Horse Gilwood U	34.2	11.4	-22.8	Re-evaluation - Decreased N & Increased Ri
Little Horse Gilwood V	39.5	19.0	-20.5	Re-evaluation - Decreased Ri
Little Horse Gilwood Y	97.2	107.0	+9.8	Re-evaluation - Increased Ri
Little Horse Gilwood AA	34.8	10.8	-24.0	Re-evaluation - Decreased N & Ri
Little Horse Gilwood GG	48.3	9.7	-38.6	Re-evaluation - Decreased N & Ri
Little Horse Gilwood KK	17.0	4.2	-12.8	Re-evaluation - Decreased Ri
Little Horse Gilwood NN	Conf	42.5		
Little Horse Gilwood QQ	0.0	19.0	+19.0	
Little Smoky D-3	205.0	210.0	+5.0	Re-evaluation - Increased Ri
Lloydminster Colony BBB	0.0	7.7	+7.7	
Lloydminster General Petroleum N	67.3	85.0	+17.7	Re-evaluation - Increased Ri
Lloydminster Lloydminster S	Conf	11.5		
Lloydminster McLaren N	14.6	29.2	+14.6	Re-evaluation - Increased Ri
Lloydminster Sparky & General Petroleum C&D Primary	2711.0	3389.0	+678.0	Re-evaluation - Increased Ri
Lloydminster Sparky C & General Petroleum A	1747.0	1941.0	+194.0	Re-evaluation - Increased Ri
Lloydminster Sparky D & General Petroleum B	108.0	131.0	+23.0	Re-evaluation - Decreased N & Increased Ri
Lloydminster Sparky E & General Petroleum F	445.0	416.0	-29.0	Re-evaluation - Decreased Ri
Lloydminster Sparky F	321.0	0.0	-321.0	Coalesced Lloydminster Sparky F & Sparky, General Petroleum C & D Pools
Lloydminster Sparky S	25.6	29.2	+3.6	Re-evaluation - Increased Ri
Lloydminster Sparky X	21.1	22.5	+1.4	Re-evaluation - Increased Ri
Lloydminster Sparky FFF	10.8	15.1	+4.3	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Lloydminster Sparky UUU	7.8	15.5	+7.7	Pool Development - Increased N
Lloydminster Sparky A2A	11.8	26.0	+14.2	Pool Development - Increased N & Ri
Lloydminster Sparky E2E	39.9	57.0	+17.1	Re-evaluation - Increased Ri
Lloydminster Sparky G2G	6.4	8.2	+1.8	Resumed Production Operations
Lloydminster Sparky N3N	Conf	15.3		
Lochend Cardium D	5.7	0.5	-5.2	Re-evaluation - Decreased N & Ri
Lone Pine Creek D-2 A	100.0	125.0	+25.0	Re-evaluation - Increased Ri
Lone Pine Creek Ellerslie A	14.9	4.5	-10.4	Re-evaluation - Decreased N & Ri
Long Coulee Glauconitic T	74.8	54.0	-20.8	Re-evaluation - Decreased Ri
Long Coulee Glauconitic UU	Conf	8.1		
Long Coulee Glauconitic VV	Conf	9.0		
Long Coulee Sawtooth D, Livingstone A & B	28.5	75.0	+7.1	Pools Commingled
Long Coulee Sunburst F	30.1	13.1	-17.0	Re-evaluation - Decreased Ri
Long Coulee Sunburst I	206.0	193.0	-13.0	Re-evaluation - Decreased Ri
Long Coulee Sunburst L	34.5	6.9	-27.6	Re-evaluation - Decreased Ri
Loon Granite Wash E	355.0	533.0	+178.0	Re-evaluation - Increased Ri
Loon Granite Wash K	30.7	26.9	-3.8	Pool Abandoned
Loon Granite Wash O	2.9	0.5	-2.4	Re-evaluation - Decreased N & Ri
Loon Granite Wash Q	9.6	1.4	-8.2	Re-evaluation - Decreased N & Ri
Loon Granite Wash S	49.5	71.2	+21.7	Re-evaluation - Decreased N & Increased Ri
Loon Granite Wash W	24.0	6.0	-18.0	Re-evaluation - Decreased Ri
Loon Slave Point A & Granite Wash J	195.0	223.0	+28.0	Re-evaluation - Increased Ri
Loon Slave Point C & Granite Wash B	202.0	238.0	+36.0	Re-evaluation - Increased Ri
Loon Slave Point L	Conf	14.8		
Malmo D-2 A	1157.0	1346.0	+189.0	Re-evaluation - Increased N & Ri
Malmo D-3 A	832.0	656.0	-176.0	Re-evaluation - Decreased Ri
Manir Charlie Lake I	0.0	6.6	+6.6	New Pool - Previously in Manir Charlie Lake A
Manola Lower Mannville O	Conf	32.8		
Manyberries Sunburst C Primary	83.3	106.0	+22.7	Pool Development - Increased N & Decreased Ri
Manyberries Sunburst Q Primary	125.0	156.0	+31.0	Re-evaluation - Increased Ri
Water Flood	1254.0	1484.0	+230.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Manyberries Sunburst HH	0.8	3.7	+2.9	Re-evaluation - Increased Ri
Manyberries Sunburst LL Water Flood	117.0	152.0	+35.0	Re-evaluation - Increased Ri
Manyberries Sunburst QQQ	Conf	4.4		
Manyberries Swift C	Conf	8.9		
Marlowe Keg River C	0.0	169.0	+169.0	
Marwayne General Petroleum A	58.3	3.1	-55.2	Pool Abandoned
Marwayne Sparky C	4.6	28.4	+23.8	Pool Development - Increased N
Marwayne Sparky H	15.0	86.9	+71.9	Pool Development - Increased N
Matziwin Glauconitic D	8.0	1.0	-7.0	Re-evaluation - Decreased N & Ri
Matziwin Glauconitic H	18.3	40.4	+22.1	Pool Development - Increased N
Matziwin Glauconitic J	15.5	5.4	-10.1	Re-evaluation - Decreased N & Ri
Matziwin Glauconitic L	Conf	23.7		
Matziwin Upper Mannville C	6.5	0.7	-5.8	Re-evaluation - Decreased Ri
McKinley Gething C	6.8	1.3	-5.5	Re-evaluation - Decreased N & Ri
McLeans Creek Gilwood J	Conf	15.8		
McLeans Creek Gilwood K	0.0	17.6	+17.6	
McLeod Bluesky D & Gething L	30.0	21.0	-9.0	Pools Commingled
McLeod Cardium A	65.0	94.5	+29.5	Re-evaluation - Increased N & Ri
McLeod Cardium H	Conf	30.0		
McLeod Cardium I	Conf	8.1		
McLeod Gething F	11.7	5.8	-5.9	Re-evaluation - Decreased N & Ri
McLeod Gething G	4.6	2.0	-2.6	Re-evaluation - Decreased N & Ri
McLeod Gething CC	15.1	0.4	-14.7	Re-evaluation - Decreased N & Ri
Medicine River Basal Quartz B Primary	170.0	106.0	-64.0	Re-evaluation - Decreased N & Ri
Water Flood	348.0	493.0	+145.0	Re-evaluation - Increased Ri
Medicine River Basal Quartz LL	37.5	34.0	-3.5	Re-evaluation - Decreased Ri
Medicine River Basal Quartz PP	0.0	35.5	+35.5	
Medicine River Basal Quartz QQ	0.0	14.5	+14.5	New Pool
Medicine River Elkton-Shunda F	7.3	1.5	-5.8	Re-evaluation - Decreased N & Ri
Medicine River Glauconitic A & Ostracod CC Primary	320.0	405.0	+85.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Medicine River Glauconitic D & Ostracod A Water Flood	628.0	679.0	+51.0	Re-evaluation - Increased Ri
Medicine River Jurassic D Primary	267.0	367.0	+100.0	Re-evaluation - Increased N & Decreased Ri
Medicine River Jurassic Q	60.8	0.0	-60.8	Coalesced Medicine River Jurassic D & Q Pools
Medicine River Jurassic V	15.4	3.0	-12.4	Pool Abandoned
Medicine River Jurassic EE	6.7	0.3	-6.4	Re-evaluation - Decreased N & Ri
Medicine River Nisku A	100.0	97.0	-3.0	Re-evaluation - Decreased Ri
Medicine River Pekisko B Primary	33.0	17.6	-15.4	Re-evaluation - Decreased Ri
Water Flood	174.0	156.0	-18.0	Re-evaluation - Increased N & Decreased Ri
Medicine River Pekisko N	1013.0	849.0	-164.0	Re-evaluation - Decreased N
Medicine River Pekisko Y	0.0	20.8	+20.8	New Pool - previously part of Medicine River Pekisko N
Medicine River Viking P	5.7	3.5	-2.2	Re-evaluation - Decreased Ri
Meekwap D-2 A Water Flood	6310.0	6873.0	+563.0	Re-evaluation - Increased N & Ri
Meekwap D-2 G	24.2	0.2	-24.0	Re-evaluation - Decreased Ri
Meekwap Gething A	0.0	1.7	+1.7	
Michichi Banff L	18.8	24.2	+5.4	Re-evaluation - Increased Ri
Michichi Banff W	2.7	0.4	-2.3	Re-evaluation - Decreased N & Ri
Michichi Lower Mannville I	21.0	15.4	-5.6	Re-evaluation - Decreased Ri
Mikwan D-2 C	29.0	19.4	-9.6	Re-evaluation - Decreased Ri
Mikwan D-2 F	22.4	12.8	-9.6	Re-evaluation - Decreased Ri
Mikwan D-2 H	6.7	4.8	-1.9	Re-evaluation - Decreased Ri
Mikwan D-2 J	37.8	4.7	-33.1	Re-evaluation - Decreased N & Ri
Mikwan D-3 B	129.0	153.0	+24.0	Re-evaluation - Decreased N & Increased Ri
Mikwan Lower Mannville H	6.4	4.8	-1.6	Delete Pool
Mikwan Viking O	6.3	0.1	-6.2	Re-evaluation - Decreased Ri
Milo Ellerslie E	1.3	0.1	-1.2	Pool Abandoned
Minehead Belly River A	2.1	4.7	+2.6	Resumed Production Operations
Minnehik-Buck Lake Cardium U	3.4	4.7	+1.3	Renamed - Previously Coral Cardium A
Minnehik-Buck Lake Ostracod G	25.3	30.6	+5.3	Re-evaluation - Increased Ri
Minnehik-Buck Lake Ostracod H	11.8	9.6	-2.2	Re-evaluation - Decreased Ri
Minnehik-Buck Lake Ostracod I	18.1	19.9	+1.8	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Minnehik-Buck Lake Ostracod M	0.0	14.7	+14.7	
Minnehik-Buck Lake Viking E	8.4	10.6	+2.2	Re-evaluation - Increased Ri
Minnehik-Buck Lake Viking H	43.8	40.7	-3.1	Re-evaluation - Decreased Ri
Minnehik-Buck Lake Viking L	Conf	8.7		
Mirage Charlie Lake A	Conf	6.3		
Mooney Gilwood A	22.1	7.1	-15.0	Re-evaluation - Decreased N & Ri
Moose Rundle C	0.0	600.0	+600.0	
Morgan Dina B	0.0	6.0	+6.0	
Morinville D-1 C	7.0	2.7	-4.3	Re-evaluation - Decreased Ri
Morinville D-3 G	12.7	4.5	-8.2	Re-evaluation - Decreased N & Ri
Morinville D-3 H	60.6	101.0	+40.4	Re-evaluation - Increased N
Morinville D-3 I	63.9	57.0	-42.1	Coalesced Morinville D-3 I and D-3 P Pools
Morinville D-3 N	Conf	7.8		
Morinville D-3 P	Conf	17.5		
Morinville Lower Mannville Z & GG	8.3	2.9	-5.4	Re-evaluation - Decreased N & Ri
Mossleigh Glauconitic A	54.5	112.0	+57.5	Re-evaluation - Increased N & Ri
Mossleigh Glauconitic B	11.7	4.7	-7.0	Re-evaluation - Decreased Ri
Mossleigh Glauconitic C	Conf	14.7		
Mossleigh Lower Mannville F	0.0	8.6	+8.6	
Mulligan Charlie Lake C	56.2	42.2	-14.0	Re-evaluation - Decreased Ri
Neerlandia Ellerslie H	Conf	4.6		
Nelson Belly River B	8.8	1.4	-7.4	Re-evaluation - Decreased N & Ri
Nelson Lower Mannville B	12.9	78.5	+65.6	Pool Development - Increased N & Ri
Nelson Lower Mannville G	0.0	22.2	+22.2	New Pool
Nelson Upper Mannville F	4.1	0.5	-3.6	Re-evaluation - Decreased N & Ri
Nelson Viking A	160.0	192.0	+32.0	Re-evaluation - Increased Ri
Nevis D-2 B	9.9	0.7	-9.2	Re-evaluation - Decreased N & Ri
Nevis D-3 F	11.1	16.0	+4.9	Resumed Production Operations
Nevis D-3 G	72.0	65.6	-6.4	Re-evaluation - Decreased Ri
Nevis D-3 J	Conf	11.0		
Nevis Upper Mannville H	77.9	93.5	+15.6	Re-evaluation - Increased Ri
New Norway D-2	1335.0	1307.0	-28.0	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Nipisi Gilwood K	8.9	0.2	-8.7	Re-evaluation - Decreased N & Ri
Nipisi Gilwood L	16.5	3.7	-12.8	Re-evaluation - Decreased N & Ri
Nipisi Gilwood M	46.7	7.1	-39.6	Re-evaluation - Decreased Ri
Nipisi Keg River Sand V	Conf	13.6		
Nipisi Keg River Sandstone T	6.4	0.0	-6.4	Coalesced Nipisi Keg River Sandstone A & T Pools
Niton Basal Quartz I & Rock Crk A	28.5	21.5	-7.0	Re-evaluation - Decreased Ri
Niton Cardium K	Conf	9.1		
Niton Rock Creek F				
Primary	92.2	122.0	+29.8	Re-evaluation - Increased N & Decreased Ri
Water Flood	1439.0	1754.0	+315.0	Re-evaluation - Increased N & Ri
Normandville Mississippian I	8.6	4.2	-4.4	Pool Abandoned
Normandville Mississippian U	0.0	12.5	+12.5	
Normandville Montney A	10.2	0.5	-9.7	Re-evaluation - Decreased N & Ri
Normandville Montney C	6.3	0.4	-5.9	Re-evaluation - Decreased N & Ri
Normandville Pekisko B	Conf	13.0		
Northville Jurassic A	6.9	4.1	-2.8	Re-evaluation - Decreased Ri
Northville Rock Creek B	20.0	4.0	-16.0	Re-evaluation - Decreased Ri
Ogston Granite Wash G	21.3	24.8	+3.5	Resumed Production Operations
Ogston Granite Wash H	5.7	9.2	+3.5	Resumed Production Operations
Ogston Granite Wash M	9.5	1.3	-8.2	Re-evaluation - Decreased N & Ri
Ogston Granite Wash N	Conf	31.8		
Ogston Granite Wash O	Conf	39.6		
Ogston Granite Wash P	Conf	14.8		
Ogston Granite Wash Q	Conf	11.2		
Ogston Granite Wash R	Conf	7.1		
Okotoks Wabamun C	Conf	52.6		
Otter Granite Wash D	7.5	4.6	-2.9	Pool Abandoned
Otter Granite Wash J	17.3	11.4	-5.9	Re-evaluation - Decreased Ri
Otter Granite Wash EE	11.7	6.8	-4.9	Re-evaluation - Decreased Ri
Otter Granite Wash KK	33.7	39.3	+5.6	Re-evaluation - Increased N
Otter Granite Wash LL	9.1	12.9	+3.8	Resumed Production Operations
Otter Granite Wash TT	37.6	58.8	+21.2	Re-evaluation - Increased N
Otter Slave Point A	293.0	208.0	-85.0	Re-evaluation - Increased N & Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Otter Slave Point D	0.0	29.9	+29.9	
Paddle River Ostracod C	0.0	10.5	+10.5	
Panny Keg River C	283.0	332.0	+49.0	Re-evaluation - Decreased N & Increased Ri
Panny Keg River G	59.5	52.3	-7.2	Re-evaluation - Decreased Ri
Panny Keg River O	4.6	1.3	-3.3	Re-evaluation - Decreased Ri
Panny Keg River DD	38.9	19.4	-19.5	Re-evaluation - Decreased N
Panny Keg River EE	11.1	2.7	-8.4	Re-evaluation - Decreased N & Ri
Panny Keg River HH	9.1	2.7	-6.4	Re-evaluation - Decreased N & Ri
Parflesh Upper Mannville J	11.1	2.8	-8.3	Re-evaluation - Decreased N & Ri
Parkland Barons A	0.0	5.0	+5.0	
Peacock Barons B	13.7	17.4	+3.7	Pool Development - Increased N & Decreased Ri
Peacock Barons C	0.0	4.8	+4.8	
Peacock Barons C & Blairmore B	4.8	6.1		Pools Commingled
Peco Belly River E	15.7	8.0	-7.7	Re-evaluation - Decreased Ri
Peco Elkton-Shunda A	15.9	4.1	-11.8	Pool Abandoned
Pembina Belly River J Water Flood	225.0	243.0	+18.0	Re-evaluation - Increased Ri
Pembina Belly River AA	192.0	288.0	+96.0	Re-evaluation - Increased Ri
Pembina Belly River II	84.2	88.0	+3.8	Re-evaluation - Increased Ri
Pembina Belly River DDD Primary	22.8	30.4	+7.6	Re-evaluation - Increased Ri
Pembina Belly River FFF, GGG K2K & S2S Primary	413.0	496.0	+83.0	Re-evaluation - Increased Ri
Pembina Belly River A2A	43.8	37.0	-6.8	Re-evaluation - Decreased Ri
Pembina Belly River G2G	13.0	3.7	-9.3	Re-evaluation - Decreased N & Ri
Pembina Belly River X2X	12.0	6.6	-5.4	Re-evaluation - Decreased N & Ri
Pembina Belly River Z2Z	6.2	3.5	-2.7	Re-evaluation - Decreased N & Ri
Pembina Belly River D4D	8.2	0.9	-7.3	Re-evaluation - Decreased N & Ri
Pembina Belly River I4I	5.2	0.1	-5.1	Re-evaluation - Decreased N & Ri
Pembina Belly River K4K	43.2	21.6	-21.6	Re-evaluation - Decreased N
Pembina Belly River P4P	15.8	1.4	-14.4	Coalesced Pembina Belly River O4O & P4P Pools
Pembina Belly River T4T	0.0	22.3		
Pembina Belly River V4V	0.0	19.5	+19.5	

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Pembina Cardium H	14.5	19.4	+4.9	Re-evaluation - Increased Ri
Pembina Cardium L Water Flood	83.5	94.4	+10.9	Re-evaluation - Increased Ri
Pembina Cardium N	7.2	7.0	-0.2	Re-evaluation - Decreased N & Ri
Pembina Cardium W	5.1	0.5	-4.6	Pool Abandoned
Pembina Cardium Primary	23800.0	26870.0	+3070.0	Re-evaluation - Decreased N & Increased Ri
Water Flood	197000.0	193700.0	-3300.0	Re-evaluation - Increased N & Decreased Ri
Pembina Ellerslie A	219.0	244.0	+25.0	Re-evaluation - Increased Ri
Pembina Ellerslie D	15.5	4.7	-10.8	Re-evaluation - Decreased Ri
Pembina Ellerslie Q	0.0	13.2	+13.2	
Pembina Ellerslie T	7.7	2.9	-4.8	Re-evaluation - Decreased Ri
Pembina Ellerslie EE & Jurassic HHH	3.4	0.2	-3.2	Re-evaluation - Decreased N & Ri
Pembina Ellerslie SS	3.9	0.2	-3.7	Re-evaluation - Decreased N & Ri
Pembina Ellerslie WW	11.2	1.2	-10.0	Re-evaluation - Decreased N & Ri
Pembina Ellerslie VVV	0.0	14.7	+14.7	
Pembina Glauconitic P	88.2	99.3	+11.1	Re-evaluation - Increased Ri
Pembina Glauconitic DD	4.4	2.9	-1.5	Re-evaluation - Decreased Ri
Pembina Glauconitic II	9.2	13.7	+4.5	Re-evaluation - Increased Ri
Pembina Jurassic G	9.6	1.8	-7.8	Re-evaluation - Decreased Ri
Pembina Jurassic J	16.3	10.6	-5.7	Re-evaluation - Decreased Ri
Pembina Jurassic N	27.8	33.4	+5.6	Re-evaluation - Increased Ri
Pembina Jurassic R	94.9	147.0	+52.1	Re-evaluation - Decreased N & Increased Ri
Pembina Jurassic CC	12.7	15.0	+2.3	Re-evaluation - Increased Ri
Pembina Jurassic NN	11.3	4.6	-6.7	Re-evaluation - Decreased N & Ri
Pembina Jurassic PP	8.5	3.6	-4.9	Re-evaluation - Decreased Ri
Pembina Jurassic VV	17.8	4.4	-13.4	Re-evaluation - Decreased N & Ri
Pembina Jurassic LLL	7.4	0.3	-7.1	Re-evaluation - Decreased N & Ri
Pembina Jurassic UUU	Conf	11.4		
Pembina Jurassic C2C	0.0	2.5	+2.5	
Pembina Niisku D Solvent Flood	4000.0	4300.0	+300.0	Re-evaluation - Increased Ri
Pembina Niisku I Water Flood	398.0	450.0	+52.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Pembina Nisku Q Solvent Flood	2350.0	1848.0	-502.0	Re-evaluation - Decreased Ri
Pembina Nisku T Water Flood	112.0	145.0	+33.0	Re-evaluation - Increased Ri
Pembina Nisku T Water Flood	160.0	112.0	-48.0	Re-evaluation - Decreased Ri
Pembina Nisku EE	Conf	74.8		
Pembina Ostracod E Primary	102.0	45.7	-56.3	Re-evaluation - Decreased N & Ri
Water Flood	1374.0	1540.0	+166.0	Re-evaluation - Increased N & Ri
Pembina Ostracod Q	11.0	3.0	-8.0	Re-evaluation - Decreased N & Ri
Pembina Ostracod W	4.2	1.0	-3.2	Re-evaluation - Decreased Ri
Pembina Ostracod CC	Conf	19.4		
Pembina Ostracod EE, Ellerslie YY & Jurassic SSS	12.0	14.6	-0.8	Pools Commingled
Pembina Pekisko C	279.0	112.0	-167.0	Re-evaluation - Decreased Ri
Pembina Pekisko D	8.1	0.2	-7.9	Re-evaluation - Decreased N & Ri
Pembina Pekisko F	0.0	28.8	+28.8	Establish Oil Reserves
Pembina Viking G	15.6	32.1	+16.5	Pool Development - Increased N
Pembina Viking H	3.8	0.4	-3.4	Re-evaluation - Decreased N & Ri
Pembina Viking Q	Conf	9.8		
Pembina Viking R	Conf	106.0	+87.5	Pool Development - Increased N, Coalesced Viking O & R Pools
Penhold Lower Mannville R	0.0	7.9	+7.9	
Penny Barons A	0.0	11.2	+11.2	
Pine Creek Bluesky H	0.0	10.8	+10.8	
Pine Creek Cardium H & I	427.0	404.0	-23.0	Re-evaluation - Increased N & Decreased Ri
Pine Creek Cardium X	15.9	0.7	-15.2	Re-evaluation - Decreased N & Ri
Pine Creek Debolt A	20.3	2.6	-17.7	Re-evaluation - Decreased N & Ri
Pinto Cardium A	Conf	22.1		
Pollockville Basal Colorado A	0.0	16.8	+16.8	Oil Reserves Established
Pouce Coupe Doig C	Conf	11.7		
Pouce Coupe Halfway B	6.2	6.2	0.0	Delete Pool
Pouce Coupe South Baldonnel D	18.3	4.6	-13.7	Re-evaluation - Decreased N & Ri
Pouce Coupe South Baldonnel D & Boundary H	0.0	81.8	-4.6	Pools Commingled

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Pouce Coupe South Charlie Lake E	0.0	9.5	+9.5	
Pouce Coupe South Halfway F	5.1	0.7	-4.4	Re-evaluation - Decreased Ri
Pouce Coupe South Halfway I	0.0	6.5	+6.5	
Prevo Lower Mannville E	15.4	5.4	-10.0	Re-evaluation - Decreased N & Ri
Prevo Viking D	19.9	13.4	-6.5	Re-evaluation - Decreased Ri
Princess Basal Mannville A	306.0	459.0	+153.0	Re-evaluation - Increased Ri
Princess Basal Mannville I	70.7	118.0	+47.3	Re-evaluation - Increased Ri
Princess Basal Mannville FF	10.8	19.4	+8.6	Re-evaluation - Increased Ri
Progress Boundary B Water Flood	185.0	259.0	+74.0	Re-evaluation - Increased Ri
Progress Charlie Lake E	0.3	1.7	0.0	Coalesced Progress Charlie Lake E & F Pools
Progress Charlie Lake O	5.1	10.3	+5.2	Re-evaluation - Increased Ri
Progress Doe Creek A Primary	132.0	295.0	+163.0	Re-evaluation - Increased N & Ri
Water Flood	429.0	859.0	+430.0	Re-evaluation - Increased N & Ri
Progress Doig B	0.0	2.6	+2.6	Establish Oil Reserves
Progress Gething E	11.7	0.2	-11.5	Re-evaluation - Decreased N & Ri
Progress Halfway E	70.0	57.1	-12.9	Re-evaluation - Decreased Ri
Progress Halfway P Primary	98.9	42.6	-56.3	Re-evaluation - Decreased N
Provost Colony CC	0.0	7.8	+7.8	
Provost Cummings GG	6.0	4.8	-1.2	Re-evaluation - Decreased Ri
Provost Cummings PP	180.0	200.0	+20.0	Re-evaluation - Increased N
Provost Cummings QQ	45.6	66.3	+20.7	Resumed Production Operations
Provost Cummings BBB	7.1	9.5	+2.4	Resumed Production Operations
Provost Cummings RRR	18.5	10.0	-8.5	Re-evaluation - Decreased Ri
Provost Cummings YYY	1.7	3.7	+2.0	Resumed Production Operations
Provost Cummings ZZZ	44.1	51.5	+7.4	Re-evaluation - Increased Ri
Provost Cummings B2B	110.0	76.9	-33.1	Re-evaluation - Increased N & Decreased Ri
Provost Cummings O2O	8.5	4.2	-4.3	Re-evaluation - Decreased Ri
Provost Cummings U2U	1.2	3.0	+1.8	Resumed Production Operations
Provost Cummings A3A	2.3	0.0	-2.3	Delete Pool
Provost Cummings C3C	9.3	3.2	-6.1	Pool Abandoned
Provost Cummings E3E	47.4	11.9	-35.5	Re-evaluation - Decreased Ri

\* Year-end Review Pools

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Provost Cummings G3G	13.8	16.8	+3.0	Re-evaluation - Increased Ri
Provost Cummings J3J	7.4	0.0	-7.4	Coalesced Cummings J3J & Dina O2O Pool
Provost Cummings M3M	6.3	1.2	-5.1	Pool Abandoned
Provost Cummings B4B	3.6	0.1	-3.5	Pool Abandoned
Provost Cummings C4C	20.0	6.7	-13.3	Re-evaluation - Decreased Ri
Provost Cummings G4G	Conf	6.2		
Provost Cummings H4H	9.6	1.6	-8.0	Pool Abandoned
Provost Cummings O4O	Conf	1.9		
Provost Cummings P4P	Conf	50.4		
Provost Cummings Q4Q	Conf	4.1		
Provost Cummings T4T	0.0	3.1	+3.1	
Provost Cummings U4U	Conf	134.0		
Provost Cummings W4W	0.0	2.5	+2.5	New pool - Previously part of Provost Cummings A
Provost Cummings X4X	0.0	5.1	+5.1	New pool - Previously part of Provost Cummings A
Provost Cummings Y4Y	0.0	1.6	+1.6	New Pool
Provost Dina A	1049.0	1084.0	+35.0	Re-evaluation - Increased Ri
Provost Dina Q	37.3	212.0	+174.7	Pool Development - Increased N & Ri
Provost Dina R	19.0	22.0	+3.0	Resumed Production Operations
Provost Dina EE	0.4	0.0	-0.4	Coalesced Provost Cummings VVV & Dina EE Pools
Provost Dina PP	140.0	161.0	+21.0	Re-evaluation - Increased Ri
Provost Dina SS	628.0	519.0	-109.0	Re-evaluation - Decreased N & Increased Ri
Provost Dina RRR	30.2	34.7	+4.5	Re-evaluation - Increased Ri
Provost Dina B2B	119.0	145.0	+26.0	Re-evaluation - Increased Ri
Provost Dina L3L	39.9	51.3	+11.4	Re-evaluation - Increased Ri
Provost Dina N3N	71.7	83.7	+12.0	Re-evaluation - Increased Ri
Provost Dina G4G	733.0	1065.0	+332.0	Pool Development - Increased N & Ri
Provost Dina I4I	353.0	361.0	+8.0	Re-evaluation - Decreased N & Increased Ri
Provost Dina T4T	139.0	185.0	+46.0	Re-evaluation - Decreased N & Increased Ri
Provost Dina W4W Water Flood	69.0	92.0	+23.0	Re-evaluation - Increased Ri
Provost Dina L5L	5.5	2.0	-3.5	Pool Abandoned
Provost Dina U5U	7.6	3.1	-4.5	Re-evaluation - Decreased Ri
Provost Dina C6C	100.0	125.0	+25.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Provost Dina L6L	83.3	118.0	+34.7	Pool Development - Increased N & Ri
Provost Dina E7E	19.1	4.8	-14.3	Re-evaluation - Decreased N & Ri
Provost Dina G7G	34.0	0.0	-34.0	Coalesced Provost Dina L6L & G7G Pools
Provost Dina H7H	133.0	80.0	-53.0	Re-evaluation - Increased N & Decreased Ri
Provost Dina I7I	3.9	0.1	-3.8	Re-evaluation - Decreased N & Ri
Provost Dina K7K	6.4	0.3	-6.1	Re-evaluation - Decreased N & Ri
Provost Dina M7M	51.3	50.7	-0.6	Re-evaluation - Decreased N
Provost Dina O7O	Conf	4.5		
Provost Dina P7P	7.6	0.1	-7.5	Pool Abandoned
Provost Dina S7S	200.0	238.0	+38.0	Re-evaluation - Increased N & Ri
Provost Dina V7V	0.0	1.7	+1.7	
Provost Dina W7W	Conf	24.1		
Provost Dina X7X	0.0	3.1	+3.1	
Provost Dina Y7Y	0.0	7.2	+7.2	
Provost Dina Z7Z	0.0	10.3	+10.3	
Provost Ellerslie V	8.3	10.4	+2.1	Re-evaluation - Increased Ri
Provost Ellerslie Z	250.0	292.0	+42.0	Re-evaluation - Increased Ri
Provost Ellerslie EE	4.5	2.0	-2.5	Re-evaluation - Decreased Ri
Provost Ellerslie NN	36.6	73.5	+36.9	Pool Development - Increased N
Provost Ellerslie BBB	7.8	2.1	-5.7	Re-evaluation - Decreased Ri
Provost Ellerslie EEE	208.0	234.0	+26.0	Re-evaluation - Increased Ri
Provost Ellerslie RRR	53.1	0.0	-53.1	Transferred to Light & Medium
Provost Ellerslie RRR & H2H	8.3	82.6	+74.3	Pools Commingled
Provost Ellerslie F2F	23.2	2.5	-20.7	Re-evaluation - Increased N & Decreased Ri
Provost Ellerslie K2K	Conf	0.2		
Provost Glauconitic B	7.9	5.3	-2.6	Re-evaluation - Decreased Ri
Provost Glauconitic I	2.7	0.0	-2.7	Coalesced Provost Glauconitic I & Ellerslie F2F
Provost Glauconitic K	5.1	0.2	-4.9	Re-evaluation - Decreased Ri
Provost Glauconitic L	13.6	1.9	-11.7	Re-evaluation - Decreased N & Ri
Provost Glauconitic FF	7.8	0.1	-7.7	Re-evaluation - Decreased N & Ri
Provost Glauconitic FF	0.1	1.0	+0.9	Resumed Production Operations
Provost Glauconitic KK	0.0	3.5	+3.5	

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Provost Lloydminster U	215.0	269.0	+54.0	Re-evaluation - Increased Ri
Provost Lloydminster AA	250.0	300.0	+50.0	Re-evaluation - Increased Ri
Provost Lloydminster BB	0.0	33.5		Establish Oil Reserves
Provost Lloydminster CC	48.8	97.6	+48.8	Re-evaluation - Increased Ri
Provost Lloydminster MM	440.0	640.0	+200.0	Re-evaluation - Increased N & Ri
Provost Lloydminster NN	41.3	49.5	+8.2	Re-evaluation - Increased Ri
Provost Lloydminster DDD	167.0	221.0	+54.0	Pool Development - Increased N
Provost Lloydminster HHH	98.7	131.0	+32.3	Re-evaluation - Increased N
Provost Lloydminster JJJ	6.7	8.9	+2.2	Resumed Production Operations
Provost Lloydminster A2A	39.5	47.4	+7.9	Re-evaluation - Increased Ri
Provost Lloydminster B2B	18.7	7.5	-11.2	Re-evaluation - Decreased Ri
Provost Lloydminster F2F	14.1	1.0	-13.1	Re-evaluation - Decreased N & Ri
Provost Lloydminster V2V	3.5	10.5	+7.0	Re-evaluation - Increased Ri
Provost Lloydminster E3E	3.4	0.2	-3.2	Re-evaluation - Decreased Ri
Provost Lloydminster M3M	Conf	8.6		
Provost Lloydminster O3O	0.0	3.7	+3.7	
Provost Lloydminster P3P	Conf	4.7		
Provost Lloydminster S3S	Conf	43.4		
Provost Lloydminster T3T	Conf	27.0		
Provost Lloydminster X3X	0.0	2.1	+2.1	
Provost Lower Mannville C	12.6	16.9	+4.3	Resumed Production Operations
Provost Lower Mannville AA	14.2	20.1	+5.9	Resumed Production Operations
Provost Mannville S & Upper Mannville F	37.4	50.4	+13.0	Pool Development - Increased N
Provost McLaren D	Conf	0.4		Pool Abandoned
Provost Rex J	7.8	0.4	-7.4	Re-evaluation - Decreased N & Ri
Provost Rex T	10.2	0.0	-10.2	Coalesced Provost Rex A & T Pools
Provost Rex U	51.9	124.0	72.1	Re-evaluation - Increased N & Ri
Provost Rex Y	0.0	16.0		
Provost Sparky O	2.8	1.3	-1.5	Pool Abandoned
Provost Sparky AA	Conf	5.3		
Provost Sparky BB	Conf	11.2		
Provost Sparky DD	0.0	2.7	+2.7	

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# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Provost Upper Mannville B3B	3.0	13.7	+10.7	Resumed Production Operations
Provost Upper Mannville C4C	450.0	675.0	+225.0	Re-evaluation - Increased Ri
Provost Upper Mannville T8T	789.0	850.0	+61.0	Re-evaluation - Increased Ri
Provost Viking GGG	0.1	0.0	-0.1	Coalesced Provost Viking GGG & Viking Basal Colorado & Mannville MU No. 1
Provost Viking PPP	7.4	7.2	-0.2	Re-evaluation - Decreased Ri
Provost Viking K2K	0.0	1.7	+1.7	New pool - Previously part of Provost Mannville MU No. 1
Puakwaskau Granite Wash A	28.4	2.1	-26.3	Pool Abandoned
Queenstown Ellerslie O	10.0	0.1	-9.9	Re-evaluation - Decreased N & Ri
Queenstown Ellerslie R	0.0	1.0	+1.0	
Queenstown Ellerslie S	Conf	4.5		
Queenstown Glauconitic M	24.6	9.2	-15.4	Re-evaluation - Decreased Ri
Queenstown Glauconitic O	4.7	1.3	-3.4	Re-evaluation - Decreased Ri
Queenstown Glauconitic U	54.8	22.0	-32.8	Re-evaluation - Decreased N & Ri
Queenstown Glauconitic W	149.0	187.0	+38.0	Re-evaluation - Increased Ri
Queenstown Glauconitic X	5.6	0.2	-5.4	Re-evaluation - Decreased N & Ri
Queenstown Upper Mannville A	13.4	0.1	-13.3	Re-evaluation - Decreased N & Ri
Rainbow Keg River I Water Flood	3025.0	3440.0	+415.0	Re-evaluation - Increased N
Rainbow Keg River S	802.0	950.0	+148.0	Re-evaluation - Increased Ri
Rainbow Keg River U	1562.0	1860.0	+298.0	Re-evaluation - Increased N & Ri
Rainbow Keg River Z Solvent Flood	2275.0	2415.0	+140.0	Re-evaluation - Increased Ri
Rainbow Keg River FF Solvent Flood	1825.0	1545.0	-280.0	Re-evaluation - Increased N & Decreased Ri
Rainbow Keg River JJ Water Flood	517.0	530.0	+13.0	Re-evaluation - Increased Ri
Rainbow Keg River KK Water Flood	223.0	245.0	+22.0	Re-evaluation - Increased Ri
Rainbow Keg River PP Primary Water Flood	80.0 298.0	54.0 289.0	-26.0 -9.0	Re-evaluation - Decreased N & Increased Ri Re-evaluation - Increased N & Decreased Ri
Rainbow Keg River RR Water Flood	219.0	231.0	+12.0	Re-evaluation - Increased Ri
Rainbow Keg River GGG	205.0	221.0	+16.0	Re-evaluation - Decreased N & Increased Ri
Rainbow Keg River JJJ	48.0	38.3	-9.7	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Rainbow Keg River MMM	12.7	3.4	-9.3	Pool Abandoned
Rainbow Keg River QQQ	292.0	312.0	+20.0	Re-evaluation - Increased Ri
Rainbow Keg River O2O	455.0	585.0	+130.0	Re-evaluation - Increased Ri
Rainbow Keg River I3I	50.0	26.9	-23.1	Re-evaluation - Decreased N & Ri
Rainbow Keg River L3L	2.3	30.8	+28.5	Resumed Production Operations
Rainbow Keg River S3S	47.0	23.5	-23.5	Re-evaluation - Decreased N
Rainbow Keg River W3W	24.4	29.7	+5.3	Re-evaluation - Increased Ri
Rainbow Keg River H4H	0.0	5.2	+5.2	
Rainbow Keg River I4I	Conf	286.0		
Rainbow Keg River J4J	Conf	17.9		
Rainbow Keg River K4K	0.0	7.5	+7.5	
Rainbow Muskeg A	46.1	52.9	+6.8	Re-evaluation - Increased N & Decreased Ri
Rainbow Muskeg J	24.2	29.7	+5.5	Re-evaluation - Increased Ri
Rainbow Muskeg S	500.0	633.0	+133.0	Re-evaluation - Increased N
Rainbow Muskeg AA	19.1	10.7	-8.4	Re-evaluation - Decreased Ri
Rainbow Muskeg BB	39.4	49.3	+9.9	Re-evaluation - Increased Ri
Rainbow Muskeg CC	5.1	2.7	-2.4	Re-evaluation - Decreased N & Ri
Rainbow Muskeg II & Keg River K	990.0	1100.0	+110.0	Re-evaluation - Increased Ri
Rainbow Muskeg LL	8.5	2.4	-6.1	Pool Abandoned
Rainbow South Keg River A Water Flood	1771.7	1888.0	+116.3	Re-evaluation - Increased Ri
Rainbow South Keg River AA	6.5	19.5	+13.0	Re-evaluation - Increased N & Ri
Rainbow South Muskeg H Water Flood	544.0	845.0	+301.0	Re-evaluation - Increased Ri
Rainbow South Muskeg U	51.8	38.3	-13.5	Re-evaluation - Decreased Ri
Randell Gilwood H	Conf	15.0		
Randell Gilwood I	Conf	21.2		
Randell Gilwood J	Conf	29.0		
Randell Slave Point A	10.2	4.8	-5.4	Re-evaluation - Decreased N & Ri
Reagan Rundle A	82.8	93.0	+10.2	Re-evaluation - Increased Ri
Red Coulee Cutbank G	10.2	2.6	7.6	Re-evaluation - Decreased Ri
Red Coulee Rundle A	13.0	13.9	+0.9	Re-evaluation - Increased Ri
Red Earth Granite Wash E Primary	171.0	182.0	+11.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Red Earth Granite Wash M	6.8	5.5	-1.3	Re-evaluation - Decreased Ri
Red Earth Granite Wash DD	93.0	130.0	+37.0	Re-evaluation - Increased Ri
Red Earth Granite Wash PP	18.8	42.8	+24.0	Pool Development - Increased N
Red Earth Granite Wash XX	64.5	67.5	+3.0	Re-evaluation - Increased Ri
Red Earth Granite Wash III	87.0	3.3	-83.7	Re-evaluation - Decreased N & Ri
Red Earth Granite Wash R2R	31.3	37.5	+6.2	Re-evaluation - Increased Ri
Red Earth Granite Wash U2U	6.4	2.7	-3.7	Re-evaluation - Decreased Ri
Red Earth Granite Wash X2X	461.0	519.0	+58.0	Re-evaluation - Increased Ri
Red Earth Granite Wash I3I	34.0	8.5	-25.5	Re-evaluation - Decreased N
Red Earth Granite Wash M3M	71.4	14.9	-56.5	Re-evaluation - Decreased N & Ri
Red Earth Granite Wash O3O	15.7	0.0	-15.7	Coalesced Red Earth Granite Wash O3O & P3P Pools
Red Earth Granite Wash Q3Q	Conf	88.0		
Red Earth Granite Wash R3R	17.0	0.9	-16.1	Re-evaluation - Decreased N & Ri
Red Earth Granite Wash R3R	Conf	17.0		
Red Earth Granite Wash S3S	Conf	5.2		
Red Earth Granite Wash T3T	Conf	5.5		
Red Earth Granite Wash U3U	0.0	70.2	+70.2	
Red Earth Keg River C & Granite Wash T2T	290.0	470.0	+180.0	Pool Development - Increased N
Red Earth Slave Point F	15.5	17.9	+2.4	Re-evaluation - Increased Ri
Red Earth Slave Point GG	0.0	5.1	+5.1	
Red Willow Camrose F	352.0	123.0	-229.0	Re-evaluation - Decreased Ri
Red Willow Glauconitic D	5.1	3.8	-1.3	Re-evaluation - Decreased Ri
Redwater Basal Mannville E	50.6	108.0	+57.4	Coalesced Redwater Ellerslie G & Basal Mannville E Pools
Redwater Basal Mannville I	81.3	24.4	-56.9	Re-evaluation - Decreased Ri
Redwater Ellerslie L	3.7	1.4	-2.3	Re-evaluation - Decreased N & Ri
Redwater Ellerslie N	10.6	0.0	-10.6	Coalesced Redwater Basal Mannville E & Ellerslie N Pools
Redwater Ellerslie V	8.6	13.0	+4.4	Re-evaluation - Increased Ri
Redwater Ellerslie W	18.0	1.2	-16.8	Re-evaluation - Decreased Ri
Redwater Ellerslie Y	5.6	1.9	-3.7	Pool Abandoned
Redwater Ellerslie BB	6.8	0.1	-6.7	Pool Abandoned
Redwater Ellerslie FF	39.0	77.4	+38.4	Pool Development - Increased N
Redwater Ellerslie HH	10.9	1.5	-9.4	Re-evaluation - Decreased N & Ri

\* Year-end Review Pools

\*\* Abbreviations

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Np - Cumulative Oil Production

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N - Initial Volume in Place

**ATTACHMENT I**

**1999 RESERVE CHANGES**  
**Initial Established Crude Oil Reserves**  
**at 31 December**

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Redwater Lower Viking B	272.0	381.0	+109.0	Re-evaluation - Increased Ri
Redwater Lower Viking S	176.0	226.0	+50.0	Pool Development - Increased N
Redwater Lower Viking Z	11.8	5.9	-5.9	Re-evaluation - Decreased Ri
Redwater Middle Viking B & Lower Viking H	43.2	50.4	+7.2	Re-evaluation - Increased Ri
Retlaw Mannville I	152.0	158.0	+6.0	Re-evaluation - Increased Ri
Retlaw Mannville O	1.7	15.5	+13.8	Resumed Production Operations
Retlaw Mannville R	23.8	39.8	+16.0	Pool Development - Increased N
Retlaw Mannville V Water Flood	335.0	465.0	+130.0	Re-evaluation - Increased Ri
Retlaw Mannville LL Primary	249.0	311.0	+62.0	Re-evaluation - Increased Ri
Retlaw Mannville OOO	8.9	11.7	+2.8	Re-evaluation - Increased Ri
Retlaw Mannville G2G	36.0	71.4	+35.4	Pool Development - Increased N
Retlaw Mannville W3W	44.0	72.3	+28.3	Re-evaluation - Decreased N & Increased Ri
Retlaw Mannville A4A	3.1	0.4	-2.7	Re-evaluation - Decreased Ri
Retlaw Mannville L4L	3.1	0.0	-3.1	Delete Pool
Retlaw Mannville N4N	7.8	23.4	+15.6	Pool Development - Increased N
Retlaw Mannville R4R	5.7	0.0	-5.7	Coalesced Retlaw Mannville G2G & R4R Pools
Retlaw Mannville T4T	Conf	4.3		
Retlaw Mannville V4V	0.0	2.5	+2.5	
Ribstone Nisku B	50.6	65.8	+15.2	Re-evaluation - Increased Ri
Rich Lower Mannville H	Conf	15.1		
Rich Winnipegosis A	19.4	10.3	-9.1	Re-evaluation - Decreased Ri
Richdale Upper Mannville S	10.3	5.3	-5.0	Re-evaluation - Decreased Ri
Ricinus Cardium M	14.5	11.6	-2.9	Re-evaluation - Decreased Ri
Ricinus Cardium Q Gas Flood	728.0	688.0	-40.0	Re-evaluation - Decreased Ri
Ricinus Cardium V & W	0.0	520.0	+14.5	Pools Commingled
Ricinus Cardium TT	240.0	195.0	-45.0	Re-evaluation - Decreased N & Increased Ri
Ricinus Cardium XX	30.0	25.3	-4.7	Re-evaluation - Decreased Ri
Ricinus Cardium YYY	0.0	24.9	+24.9	New Pool - Previously in Ricinus Cardium L
Ricinus Viking GG	8.5	21.0	+12.5	Pool Development - Increased N
Rivercourse Colony A	49.6	99.2	+49.6	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

- Ri - Recovery Factor
- Np - Cumulative Oil Production
- RiN - Established Reserves
- N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Rivercourse Sparky D	41.8	69.6	+27.8	Re-evaluation - Increased Ri
Rivercourse Sparky G & Cummings A	3.2	221.0	+5.8	Pools Commingled
Rolla Debolt A	13.5	2.0	-11.5	Re-evaluation - Decreased N & Ri
Ronalane Sawtooth A	15.0	19.6	+4.6	Re-evaluation - Increased Ri
Ronalane Sawtooth K	492.0	517.0	+25.0	Re-evaluation - Increased Ri
Ronalane Sawtooth O	176.0	181.0	+5.0	Re-evaluation - Increased Ri
Ronalane Sawtooth P	66.1	70.8	+4.7	Re-evaluation - Increased Ri
Rosevear Belloy B	4.4	0.7	-3.7	Re-evaluation - Decreased Ri
Rosevear Bluesky A	Conf	214.0		Coalesced Rosevear Bluesky A & B Pools
Rosevear Bluesky B	Conf	0.0		Delete Pool
Rosevear Cardium B	11.0	5.5	-5.5	Re-evaluation - Decreased Ri
Rosevear Gething B	7.8	0.5	-7.3	Re-evaluation - Decreased N & Ri
Rowley Banff B	5.9	1.5	-4.4	Re-evaluation - Decreased Ri
Rowley Pekisko A	361.0	433.0	+72.0	Re-evaluation - Increased Ri
Rowley Upper Mannville N	13.2	17.7	+4.5	Re-evaluation - Increased Ri
Rowley Upper Mannville O	12.6	6.3	-6.3	Re-evaluation - Decreased Ri
Rycroft Charlie Lake C Primary	21.9	29.2	+7.3	Re-evaluation - Increased Ri
Rycroft Halfway F	34.0	29.3	-4.7	Re-evaluation - Decreased Ri
Saddle Hills Halfway B	6.8	1.1	-5.7	Pool Abandoned
Sakwatamau Belloy A	175.0	205.0	+30.0	Re-evaluation - Increased N & Ri
Sakwatamau Gething E	Conf	23.1		
Sakwatamau Gething F	Conf	164.0		
Sakwatamau Shunda A	4.1	2.1	-2.0	Re-evaluation - Decreased N & Ri
Salt Creek Gilwood A	21.6	16.2	-5.4	Re-evaluation - Decreased Ri
Salt Creek Slave Point A	17.8	3.5	-14.3	Re-evaluation - Decreased N & Ri
Samson Blairmore A	40.0	146.0	+106.0	Re-evaluation - Increased Ri
Samson Blairmore G	Conf	14.7		
Sawn Lake Slave Point J Primary	457.0	0.0	-457.0	Delete Primary Reserves
Water Flood	138.0	797.0	+659.0	Re-evaluation - Increased N
Seal Slave Point G	260.0	286.0	+26.0	Re-evaluation - Increased Ri
Seal Slave Point K	19.9	29.3	+9.4	Re-evaluation - Increased N

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Seal Slave Point M	Conf	29.6		
Senex Granite Wash A	35.0	4.4	-30.6	Re-evaluation - Decreased N & Ri
Senex Keg River A	56.7	41.1	-15.6	Re-evaluation - Decreased Ri
Senex Keg River C	305.0	458.0	+153.0	Re-evaluation - Increased Ri
Senex Keg River J	75.8	65.0	-10.8	Re-evaluation - Decreased Ri
Senex Keg River K	23.3	18.8	-4.5	Re-evaluation - Decreased N & Increased Ri
Senex Keg River R	26.9	24.8	-2.1	Re-evaluation - Decreased N & Increased Ri
Senex Keg River W	8.9	6.5	-2.4	Re-evaluation - Decreased N & Increased Ri
Senex Keg River Z	5.0	1.6	-3.4	Re-evaluation - Decreased N & Ri
Senex Keg River AA	22.4	13.6	-8.8	Re-evaluation - Decreased N & Increased Ri
Senex Keg River EE	80.9	131.0	+50.1	Re-evaluation - Increased N & Ri
Senex Keg River II	125.0	50.2	-74.8	Re-evaluation - Decreased N
Senex Keg River MM	48.2	7.3	-40.9	Re-evaluation - Decreased N & Ri
Senex Keg River NN	5.5	2.2	-3.3	Re-evaluation - Decreased Ri
Senex Keg River SS	13.7	43.9	+30.2	Re-evaluation - Increased N & Ri
Senex Keg River WW	40.3	16.1	-24.2	Re-evaluation - Decreased N & Ri
Senex Keg River XX	12.0	1.8	-10.2	Re-evaluation - Decreased N & Ri
Senex Keg River AAA	Conf	16.1		
Shadow Gilwood F	73.5	99.0	+25.5	Pool Development - Increased N & Decreased Ri
Shadow Gilwood X	8.1	1.6	-6.5	Re-evaluation - Decreased N & Ri
Shadow Gilwood DD	4.5	1.9	-2.6	Re-evaluation - Decreased N & Ri
Shadow Gilwood EE	60.9	25.3	-35.6	Re-evaluation - Decreased N & Ri
Shadow Gilwood KK	2.1	5.1	+3.0	Resumed Production Operations
Shadow Gilwood MM	11.0	1.1	-9.9	Re-evaluation - Decreased N & Ri
Shadow Montney A	17.3	0.6	-16.7	Re-evaluation - Decreased N & Ri
Shekilie Keg River A	141.0	136.7	-4.3	Re-evaluation - Decreased Ri
Shekilie Keg River J	105.0	100.6	-4.4	Re-evaluation - Decreased Ri
Shekilie Keg River GG	48.0	40.0	-8.0	Re-evaluation - Decreased Ri
Shekilie Keg River AAA	65.0	75.0	+10.0	Re-evaluation - Increased Ri
Shekilie Keg River MMM	49.5	42.9	-6.6	Re-evaluation - Decreased Ri
Shekilie Keg River PPP	15.0	20.0	+5.0	Resumed Production Operations
Shekilie Keg River ZZZ	35.9	26.0	-9.9	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Shekilie Keg River A2A	32.2	36.0	+3.8	Re-evaluation - Increased Ri
Shekilie Keg River G2G Water Flood	36.0	41.9	+5.9	Re-evaluation - Increased Ri
Shekilie Keg River O2O	57.6	37.3	-20.3	Re-evaluation - Decreased Ri
Shekilie Keg River Q2Q	64.3	38.6	-25.7	Re-evaluation - Decreased Ri
Shekilie Keg River T2T Water Flood	5.1	10.0	+4.9	Re-evaluation - Increased Ri
Shekilie Keg River V2V	74.3	14.9	-59.4	Re-evaluation - Decreased Ri
Shekilie Muskeg J	13.3	16.6	+3.3	Resumed Production Operations
Shekilie Muskeg K	14.8	9.7	-5.1	Re-evaluation - Decreased Ri
Shouldice Ellerslie F	0.4	3.4	+3.0	Resumed Production Operations
Shouldice Ellerslie G	6.8	3.2	-3.6	Pool Abandoned
Shouldice Ellerslie T	6.1	0.8	-5.3	Re-evaluation - Decreased N & Ri
Shouldice Glauconitic M	100.0	58.5	-41.5	Re-evaluation - Decreased N & Increased Ri
Shouldice Glauconitic R	93.8	37.5	-56.3	Re-evaluation - Decreased Ri
Shouldice Glauconitic U	5.6	11.2	+5.6	Re-evaluation - Increased N & Ri
Shouldice Glauconitic Y	7.3	29.1	+21.8	Re-evaluation - Increased Ri
Sibbald Upper Mannville C Water Flood	1485.0	1624.0	+139.0	Re-evaluation - Increased N & Decreased Ri
Simonette Beaverhill Lake A Water Flood	2970.0	3300.0	+330.0	Re-evaluation - Increased Ri
Simonette Beaverhill Lake B Water Flood	680.0	850.0	+170.0	Re-evaluation - Increased Ri
Simonette Bluesky A	30.0	28.1	-1.9	Re-evaluation - Decreased Ri
Simonette D-3 B	63.1	56.1	-7.0	Re-evaluation - Decreased Ri
Simonette Dunvegan B	0.2	0.0	-0.2	Coalesced Simonette Dunvegan A & B Pools
Simonette Wabamun C	29.3	81.4	+52.1	Resumed Production Operations
Simonette Wabamun D	20.3	4.1	-16.2	Re-evaluation - Decreased Ri
Sinclair Nikanassin E	14.5	1.1	-13.4	Pool Abandoned
Slave Granite Wash G	0.0	8.9	+8.9	New Pool - previously in Slave Slave Point X Pool
Slave Slave Point S	1449.0	1944.0	+495.0	Re-evaluation - Decreased N & Increased Ri
Slave Slave Point X	8.0	1.4	-6.6	Re-evaluation - Decreased N & Ri
Solomon Cardium A	Conf	21.8		
Souza Keg River A	30.9	26.7	-4.2	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Souaa Keg River C	15.4	10.5	-4.9	Re-evaluation - Decreased Ri
Souaa Keg River D	139.0	209.0	+70.0	Re-evaluation - Increased Ri
Souaa Keg River K	27.0	38.9	+11.9	Re-evaluation - Increased Ri
Souaa Keg River T	28.8	23.8	-5.0	Re-evaluation - Decreased N & Increased Ri
Souaa Keg River EE	Conf	13.5		
Souaa Keg River FF	Conf	11.6		
Souaa Keg River GG	Conf	13.6		
Souaa Keg River HH	0.0	67.8	+67.8	
Spirit River Charlie Lake K & Halfway F Water Flood	2435.0	2644.0	+209.0	Re-evaluation - Increased Ri
St. Anne Nordegg A	47.2	56.6	+9.4	Re-evaluation - Increased Ri
Stanmore Lower Mannville Q	113.0	128.0	+15.0	Re-evaluation - Increased Ri
Stanmore Lower Mannville GG	4.8	0.4	-4.4	Re-evaluation - Decreased N & Ri
Stanmore Lower Mannville LL	Conf	16.2		
Stanmore Upper Mannville B, SS & DDD	89.3	161.0	+49.6	Pools Commingled
Stanmore Upper Mannville BBB	25.5	10.0	-15.5	Re-evaluation - Decreased N
Stolberg Cardium A	Conf	23.6		
Strathmore Lower Mannville B Primary	7.9	1.4	-6.5	Primary Wells Abandoned
Strathmore Lower Mannville G	7.2	2.4	-4.8	Re-evaluation - Decreased N & Ri
Sturgeon Lake D-3 B	8.2	14.8	+6.6	Resumed Production Operations
Sturgeon Lake South Blairidge A	255.0	271.0	+16.0	Re-evaluation - Decreased N & Increased Ri
Sturgeon Lake South D-2 B	20.6	10.3	-10.3	Re-evaluation - Decreased Ri
Sturgeon Lake South D-2 D	0.0	43.4	+43.4	
Sturgeon Lake South Triassic A	620.0	643.0	+23.0	Re-evaluation - Decreased N & Increased Ri
Suffield Upper Mannville U Water Flood	489.0	816.0	+327.0	Re-evaluation - Increased Ri
Suffield Upper Mannville UU Water Flood	14.3	17.2	+2.9	Enhanced Recovery Recognition
Suffield Upper Mannville VV	0.0	4.0	+4.0	
Sunnynook Upper Mannville L	8.8	1.8	-7.0	Re-evaluation - Decreased N & Ri
Sunset Triassic A Water Flood	703.0	785.0	+82.0	Re-evaluation - Increased Ri

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# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Swalwell D-2 C	305.0	323.0	+18.0	Re-evaluation - Increased Ri
Swalwell D-2 H	0.0	11.9	+11.9	
Swalwell D-2 I	0.0	10.6	+10.6	
Swalwell Pekisko E	1.3	0.0	-1.3	Coalesced Swalwell Pekisko E & F Pools
Swalwell Pekisko F	75.3	76.6	+1.3	Re-evaluation - Increased Ri
Swan Hills Beaverhill Lake A & B Water Flood	41470.0	38770.0	-2700.0	Re-evaluation - Decreased N
Solvent Flood	68390.0	72760.0	+4370.0	Re-evaluation - Increased N
Swan Hills Beaverhill Lake D	0.2	0.0	-0.2	Coalesced Swan Hills Beaverhill Lake C & D Pools
Swan Hills South Beaverhill Lake A&B Primary	324.0	347.0	+23.0	Re-evaluation - Increased Ri
Swan Hills South Beaverhill Lake E	3.8	1.4	-2.4	Re-evaluation - Decreased Ri
Sylvan Lake Elkton J	27.6	46.0	+18.4	Re-evaluation - Increased Ri
Sylvan Lake Elkton K	28.4	24.9	-3.5	Re-evaluation - Decreased Ri
Sylvan Lake Elkton N	22.4	5.6	-16.8	Re-evaluation - Decreased N & Ri
Sylvan Lake Elkton-Shunda G	29.6	25.0	-4.6	Re-evaluation - Decreased Ri
Sylvan Lake Glauconitic D	8.6	0.5	-8.1	Re-evaluation - Decreased N & Increased Ri
Sylvan Lake Glauconitic G	67.2	80.6	+13.4	Re-evaluation - Increased Ri
Sylvan Lake Jurassic K	5.4	2.7	-2.7	Re-evaluation - Decreased N
Sylvan Lake Jurassic N	27.3	37.7	+10.4	Re-evaluation - Increased N & Ri
Sylvan Lake Jurassic R	11.0	12.4	+1.4	Re-evaluation - Decreased N & Increased Ri
Sylvan Lake Jurassic U	18.7	0.3	-18.4	Re-evaluation - Decreased N & Ri
Sylvan Lake Lower Mannville R	10.6	1.4	-9.2	Re-evaluation - Decreased N & Ri
Sylvan Lake Lower Mannville GG	43.9	62.2	+18.3	Re-evaluation - Increased Ri
Sylvan Lake Ostrmoed M	7.0	6.7	-0.3	Re-evaluation - Decreased Ri
Sylvan Lake Ostracod S	13.7	6.9	-6.8	Re-evaluation - Decreased Ri
Sylvan Lake Pekisko E	24.2	16.1	-8.1	Re-evaluation - Decreased Ri
Sylvan Lake Pekisko K	9.3	1.1	-8.2	Re-evaluation - Decreased N & Ri
Sylvan Lake Pekisko M	5.3	0.1	-5.2	Re-evaluation - Decreased Ri
Sylvan Lake Pekisko V	0.0	248.0	+248.0	Establish Oil Reserves
Sylvan Lake Pekisko CC	5.3	0.3	-5.0	Re-evaluation - Decreased N & Ri
Sylvan Lake Pekisko FF	135.0	0.0	-135.0	Coalesced with Sylvan Lake Pekisko V & KK Pools
Sylvan Lake Pekisko HH	5.4	0.5	-4.9	Re-evaluation - Decreased Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Sylvan Lake Pekisko II	9.1	0.9	-8.2	Re-evaluation - Decreased N & Ri
Sylvan Lake Pekisko JJ	9.0	0.1	-8.9	Re-evaluation - Decreased N & Ri
Sylvan Lake Pekisko KK	97.4	0.0	-97.4	Coalesced with Sylvan Lake Pekisko V & FF Pools
Sylvan Lake Second White Specks E	13.3	3.3	-10.0	Re-evaluation - Decreased N
Sylvan Lake Shunda K	11.2	3.3	-7.9	Re-evaluation - Decreased N & Ri
Sylvan Lake Shunda L	6.4	1.5	-4.9	Re-evaluation - Decreased N & Ri
Sylvan Lake Viking K	24.0	18.9	-5.1	Re-evaluation - Decreased Ri
Taber Glauconitic D	591.0	621.0	+30.0	Re-evaluation - Increased Ri
Taber Glauconitic K				
Primary	0.0	8.1	-9.8	Re-evaluation - Decreased N
Water Flood	1929.0	1963.0	+34.0	Re-evaluation - Increased N & Decreased Ri
Taber North Glauconitic H	45.9	61.2	+15.3	Re-evaluation - Increased Ri
Taber North Ostracod B	0.0	5.1	+5.1	
Taber North Sawtooth B	52.9	63.4	+10.5	Re-evaluation - Increased Ri
Taber North Taber V	44.7	52.2	+7.5	Re-evaluation - Decreased N & Increased Ri
Taber North Taber JJ	2.5	0.9	-1.6	Re-evaluation - Decreased N & Ri
Taber North Taber PP	14.3	7.2	-7.1	Re-evaluation - Decreased Ri
Taber North Taber RR	61.5	71.3	+9.8	Pool Development - Increased N
Taber North Taber TT	Conf	6.0		
Taber North Taber UU	0.0	2.0	+2.0	New Pool
Taber North Upper Mannville A & Sawtooth F	10.4	20.8	+10.4	Pools Commingled
Taber South Glauconitic C	61.7	65.8	+4.1	Re-evaluation - Increased Ri
Taber South Mannville B				
Primary	15.2	49.8	+34.6	Re-evaluation - Increased Ri
Water Flood	2471.0	2683.0	+212.0	Re-evaluation - Increased Ri
Taber South Mannville L	7.8	15.5	+7.7	Re-evaluation - Increased Ri
Taber South Mannville M				
Water Flood	39.7	77.5	+37.8	Re-evaluation - Increased N & Ri
Taber South Mannville N	79.5	68.0	-11.5	Re-evaluation - Decreased N
Taber South Mannville Q	17.1	0.0	-17.1	Delete Pool - Coalesced Taber South Mannville B & Q Pools
Taber South Mannville T	7.5	0.0	-7.5	Coalesced Taber South Mannville L & T Pools
Taber South Mannville U	0.0	42.8	+42.8	New Pool - Previously part of Taber South Mannville N Pool
Taber South Taber B	468.0	703.0	+235.0	Re-evaluation - Increased Ri
Taber South Taber C	7.6	0.1	-7.5	Pool Abandoned

\* Year-end Review Pools

\*\* Abbreviations

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N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Taber Southeast Mannville C	23.5	42.4	+18.9	Pool Development - Increased N & Decreased Ri
Tangent D-1 F	66.2	56.4	-9.8	Re-evaluation - Decreased N & Increased Ri
Tangent D-1 EE	14.3	11.7	-2.6	Re-evaluation - Decreased Ri
Tangent D-1 JJ	39.4	36.2	-3.2	Re-evaluation - Decreased Ri
Tangent D-1 LL	27.9	24.8	-3.1	Re-evaluation - Decreased Ri
Tangent D-1 OO	16.1	13.3	-2.8	Re-evaluation - Decreased Ri
Tangent D-1 UU	31.7	28.4	-3.3	Re-evaluation - Decreased N & Increased Ri
Tangent D-1 YY	24.0	21.5	-2.5	Re-evaluation - Decreased Ri
Tangent D-1 ZZ	28.5	21.9	-6.6	Re-evaluation - Decreased N & Increased Ri
Tangent D-1 FFF	5.6	2.1	-3.5	Re-evaluation - Decreased Ri
Tangent D-1 HHH	8.6	6.8	-1.8	Re-evaluation - Decreased Ri
Tangent D-1 III	14.5	8.4	-6.1	Pool Abandoned
Tangent Debolt C	0.0	14.4	+14.4	
Tangent Triassic J	9.6	42.3	+32.7	Pool Development - Increased N & Ri
Teepee Charlie Lake B	102.0	13.2	-88.8	Re-evaluation - Decreased N & Ri
Teepee Charlie Lake C	0.0	40.6	+40.6	
Thorsby Glauconitic D	0.0	14.0	+14.0	Oil Reserves Declared
Three Hills Creek Ellerslie H	87.0	43.5	-43.5	Re-evaluation - Decreased Ri
Three Hills Creek Viking T	3.3	0.3	-3.0	Pool Abandoned
Three Hills Creek Viking V & CC	35.8	38.6	+2.8	Pools Commingled
Three Hills Creek Viking AA	0.0	5.8	+5.8	
Three Hills Creek Viking BB	Conf	5.6		
Tomahawk Ostracod B	32.7	22.1	-10.6	Re-evaluation - Decreased Ri
Tomahawk Ostracod I	4.8	2.0	-2.8	Re-evaluation - Decreased Ri
Travers Bow Island B	10.1	2.1	-8.0	Re-evaluation - Decreased N & Ri
Trout Keg River C	204.0	220.0	+16.0	Re-evaluation - Decreased N & Increased Ri
Trout Keg River O	5.0	8.2	+3.2	Resumed Production Operations
Trout Keg River V	6.9	6.2	-0.7	Re-evaluation - Decreased Ri
Trout Keg River DD	120.0	179.0	+59.0	Re-evaluation - Increased N & Ri
Trout Keg River MM	9.9	0.9	-9.0	Re-evaluation - Decreased Ri
Trout Keg River NN	Conf	29.3		
Trout Keg River-Granite Wash B	515.0	588.0	+73.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place



# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Turin Livingstone A	175.0	199.0	+24.0	Re-evaluation - Increased N & Decreased Ri
Turin Livingstone C	78.7	86.6	+7.9	Re-evaluation - Increased Ri
Turin Livingstone F	Conf	2.9		
Turin Livingstone G	Conf	4.8		
Turin Livingstone I	Conf	5.7		
Turin Lower Mannville O	0.7	2.3	+1.6	Re-evaluation - Increased Ri
Turin Lower Mannville V	21.9	25.8	+3.9	Re-evaluation - Increased Ri
Turin Lower Mannville DD	24.6	23.3	-1.3	Re-evaluation - Decreased Ri
Turin Lower Mannville EE, FF & GG	133.0	147.0	+14.0	Re-evaluation - Increased Ri
Turin Lower Mannville LL	13.9	17.4	+3.5	Resumed Production Operations
Turin Lower Mannville OO	0.1	0.0	-0.1	Coalesced Turin Lower Mannville OO & TT Pools
Turin Lower Mannville PP	3.9	0.0	-3.9	Coalesced Upper Mannville C & Lower Mannville PP Pools
Turin Lower Mannville KKK	9.0	5.9	-3.1	
Turin Lower Mannville OOO	9.6	21.8	+12.2	Pool Development - Increased N & Ri
Turin Lower Mannville B2B	65.0	114.0	+49.0	Re-evaluation - Increased N & Ri
Turin Lower Mannville E2E	10.6	14.3	+3.7	Re-evaluation - Decreased Ri
Turin Lower Mannville F2F	9.3	14.0	+4.7	Re-evaluation - Increased Ri
Turin Lower Mannville J2J	4.3	1.3	-3.0	Pool Abandoned
Turin Lower Mannville M2M	8.1	3.2	-4.9	Pool Abandoned
Turin Sawtooth E	3.6	0.0	-3.6	Coalesced Sawtooth C, Lower Mannville MM & Sawtooth A Pools
Turin Upper Mannville J	144.0	167.0	+23.0	Re-evaluation - Increased Ri
Turin Upper Mannville Q	9.1	2.3	-6.8	Re-evaluation - Decreased Ri
Turin Upper Mannville U	24.6	36.9	+12.3	Re-evaluation - Increased Ri
Turin Upper Mannville X	Conf	23.6		
Turner Valley Rundle E	0.0	71.7	+71.7	
Twining Glauconitic C	24.9	12.5	-12.4	Re-evaluation - Decreased Ri
Twining Lower Mannville O	0.7	4.0	+3.3	Re-evaluation - Increased Ri
Twining Lower Mannville U	21.0	23.8	+2.8	Re-evaluation - Increased Ri
Twining Rundle E	1.4	0.0	-1.4	Coalesced Twining Lower Mannville A, Rundle A & E Pools
Two Creek Jurassic A	29.5	78.8	+49.3	Pool Development - Increased N & Decreased Ri
Two Creek Jurassic B	76.6	135.0	+58.4	Pool Development - Increased N

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

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N - Initial Volume in Place



# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Utikuma Lake Gilwood D Primary	152.0	199.0	+47.0	Re-evaluation - Increased Ri
Utikuma Lake Keg River Sand H	46.3	89.0	+42.7	Re-evaluation - Increased N & Decreased Ri
Utikuma Lake Keg River Sand S	128.0	164.0	+36.0	Re-evaluation - Increased Ri
Utikuma Lake Keg River Sand JJ	9.8	3.5	-6.3	Pool Abandoned
Utikuma Lake Keg River Sand SS	14.1	18.3	+4.2	Re-evaluation - Increased Ri
Utikuma Lake Keg River Sand DDD	42.0	14.0	-28.0	Re-evaluation - Decreased Ri
Utikuma Lake Keg River Sand HHH	Conf	13.1		
Utikuma Lake Slave Point L	Conf	46.5		
Valhalla Boundary D	111.0	137.0	+26.0	Pool Development - Increased N & Decreased Ri
Valhalla Charlie Lake H	215.0	211.0	-4.0	Re-evaluation - Decreased N & Increased Ri
Valhalla Charlie Lake K	20.8	21.7	+0.9	Re-evaluation - Increased Ri
Valhalla Charlie Lake U	0.0	42.1	+42.1	New Pool - previously part of Valhalla Charlie Lake H
Valhalla Charlie Lake V	0.0	0.4	+0.4	New Pool - previously part of Valhalla Charlie Lake H
Valhalla Charlie Lake W	0.0	19.2	+19.2	New Pool - previously part of Valhalla Charlie Lake H
Valhalla Charlie Lake X	0.0	8.6	+8.6	New Pool - previously part of Valhalla Charlie Lake H
Valhalla Charlie Lake Y	0.0	5.2	+5.2	New Pool - previously part of Valhalla Charlie Lake H
Valhalla Charlie Lake Z	0.0	4.9	+4.9	New Pool - previously part of Valhalla Charlie Lake H
Valhalla Charlie Lake AA & Boundary D	0.0	152.0	15.0	Pools Commingled
Valhalla Doe Creek I Primary	1261.0	1096.0	-165.0	Re-evaluation - Decreased N
Water Flood	7949.0	9024.0	+1075.0	Re-evaluation - Increased N & Ri
Valhalla Doe Creek V Water Flood	950.0	1125.0	175.0	Re-evaluation - Increased Ri
Valhalla Doe Creek Y Water Flood	43.2	86.4	+43.2	Enhanced Recovery Recognition
Valhalla Halfway H	8.3	10.0	+1.7	Re-evaluation - Increased Ri
Valhalla Montney S	Conf	58.1		
Valhalla Montney X	0.0	17.3	+17.3	
Verger Mannville J	1.6	0.2	-1.4	Pool Abandoned
Verger Upper Mannville Q	Conf	21.3		
Vermilion Sparky A	772.0	807.0	+35.0	Re-evaluation - Decreased N & Increased Ri
Viking-Kinsella Sparky F Primary	22.6	31.6	+9.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

\*\* Abbreviations

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RiN - Established Reserves

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# ATTACHMENT 1

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Viking-Kinsella Sparky DD	3.2	0.0	-3.2	Coalesced Viking-Kinsella Sparky DD & Upper Mannville A4A Pools
Viking-Kinsella Sparky QQ	Conf	0.1		
Viking-Kinsella Upper Mannville X Water Flood	1925.0	780.0	-1145.0	Re-evaluation - Decreased N
Viking-Kinsella Upper Mannville W3W	0.0	12.8	+12.8	
Viking-Kinsella Upper Mannville Z3Z Water Flood	0.0	1096.0	+1096.0	New Pool - Previously part of Viking-Kinsella Upper Mannville X
Viking-Kinsella Upper Mannville A4A Water Flood	0.0	306.0	+306.0	New Pool - Previously part of Viking-Kinsella Upper Mannville X
Virginia Hills Beaverhill Lake B	0.1	0.0	-0.1	Coalesced Virginia Hills Beaverhill Lake & Beaverhill Lake B Pools
Virginia Hills Belloy A Water Flood	6500.0	7150.0	+650.0	Re-evaluation - Increased Ri
Virginia Hills Gething A	9.6	13.2	+3.6	Resumed Production Operations
Virgo Keg River D Water Flood	125.0	134.0	+9.0	Re-evaluation - Increased Ri
Virgo Keg River P Water Flood	36.0	38.5	+2.5	Re-evaluation - Increased Ri
Virgo Keg River TT	23.1	29.0	+5.9	Resumed Production Operations
Virgo Keg River VV	196.0	192.2	-3.8	Pool Abandoned
Virgo Keg River LLL	62.1	105.0	-1.8	Coalesced Virgo Keg River LLL & XXX Pools
Virgo Keg River YYY	52.5	46.2	-6.3	Pool Abandoned
Virgo Keg River ZZZ	87.8	93.6	+5.8	Re-evaluation - Increased Ri
Virgo Keg River S3S	23.8	18.0	-5.8	Pool Abandoned
Virgo Keg River V3V	60.0	48.1	-11.9	Pool Abandoned
Virgo Keg River K4K	24.0	19.0	-5.0	Pool Abandoned
Virgo Keg River F5F	36.1	54.2	+18.1	Re-evaluation - Increased Ri
Virgo Keg River N5N	25.0	19.5	-5.5	Pool Abandoned
Virgo Keg River E6E	Conf	101.0		
Virgo Keg River F6F	Conf	44.8		
Virgo Keg River G6G	Conf	6.8		
Virgo Muskeg B	29.3	24.1	-5.2	Pool Abandoned
Vulcan Turner Valley D	2.8	0.4	-2.4	Pool Abandoned

\* Year-end Review Pools

\*\* Abbreviations

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# ATTACHMENT I

## 1999 RESERVE CHANGES Initial Established Crude Oil Reserves at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Wainwright Sparky J Primary	10.6	0.0	-10.6	Coalesced Sparky J & Wainwright Wainwright, Sparky A & Z Pools
Water Flood	77.5	0.0	-77.5	Coalesced Sparky J & Wainwright Wainwright, Sparky A & Z Pools
Wainwright Sparky U	0.1	0.0	-0.1	Coalesced Wainwright Sparky U & Wainwright B Pools
Wapiti Dunvegan B	267.0	281.0	+14.0	Re-evaluation - Increased N
Waskahigan Dunvegan A	180.0	314.0	+134.0	Re-evaluation - Increased N & Ri
Watelet Ellerslie A	87.3	107.0	+19.7	Re-evaluation - Increased Ri
Watts Banff A	5.0	3.3	-1.7	Pool Abandoned
Wayne-Rosedale Basal Colorado D	12.4	116.0	+103.6	Coalesced Wayne-Rosedale Basal Quartz C, D & E Pools
Wayne-Rosedale Glauconitic QQ	23.9	6.0	-17.9	Re-evaluation - Decreased N & Ri
Wayne-Rosedale Glauconitic III	0.0	6.1	+6.1	
Wayne-Rosedale Nisku D	82.8	0.0	-82.8	Coalesced Wayne-Rosedale Nisku C & D Pools
Wayne-Rosedale Nisku E	156.0	138.0	-18.0	Re-evaluation - Decreased N & Increased Ri
Wayne-Rosedale Ostracod M	44.8	56.0	+11.2	Re-evaluation - Increased Ri
Wembley Doig E	282.0	346.0	+64.0	Pool Development - Increased N
Westerose Belly River A	22.6	11.3	-11.3	Re-evaluation - Decreased N & Ri
Westerose South Banff C	651.0	1050.0	+399.0	Pool Development - Increased N & Ri
Westerose South Banff F	12.6	0.1	-12.5	Pool Abandoned
Westerose South Basal Quartz P	28.7	4.8	-23.9	Re-evaluation - Decreased N & Ri
Westerose South Glauconitic C	2.6	4.6	+2.0	Re-evaluation - Increased Ri
Westerose South Glauconitic J	Conf	6.1		
Westlock Viking EE	2.9	1.2	-1.7	Pool Abandoned
Widewater Gilwood A	454.0	504.0	+50.0	Re-evaluation - Increased Ri
Wildmere Colony I	21.8	34.9	+13.1	Re-evaluation - Increased Ri
Wildmere Lloydminster A & Sparky E Primary	3142.0	3770.0	+628.0	Re-evaluation - Increased Ri
Wildmere Lloydminster C	29.4	33.0	+3.6	Resumed Production Operations
Wildmere Sparky N	356.0	603.0	+247.0	Re-evaluation - Increased N & Ri
Wildmere Sparky Q	0.1	4.9	+4.8	Resumed Production Operations
Willesden Green Belly River C	6.4	6.2	-0.2	Pool Abandoned
Willesden Green Belly River H	46.3	53.0	+6.7	Re-evaluation - Increased Ri
Willesden Green Belly River MM	21.7	10.9	-10.8	Re-evaluation - Decreased Ri
Willesden Green Belly River RRR	0.0	8.1	+8.1	

\* Year-end Review Pools

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R/N - Established Reserves

N - Initial Volume in Place

# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Willesden Green Cardium S	0.0	3.5	+3.5	
Willesden Green Ellerslie M	Conf	53.2		
Willesden Green Ostracod G	0.0	28.0		
Willesden Green Ostracod H	Conf	162.0		
Willesden Green Rock Creek O	0.0	12.4	+12.4	
Willesden Green Second White Specks F	19.1	22.0	+2.9	Re-evaluation - Increased Ri
Willesden Green Second White Specks S	0.0	31.0	+31.0	
Willesden Green Viking M & Rock Creek M	5.2	14.7	+1.5	Pools Commingled
Willesden Green Viking JJ	7.1	18.9	+11.8	Re-evaluation - Increased Ri
Wilson Creek Belly River D	145.0	152.0	+7.0	Re-evaluation - Increased Ri
Wilson Creek Second White Specks B	3.1	15.8	+12.7	Pool Development - Increased N & Ri
Wimborne D-2 B	640.0	797.0	+153.6	Coalesced Wimborne D-2 B & D-2 E Pools
Wimborne D-2 E	0.0	3.4	+3.4	
Windfall D-3 L	Conf	173.0		
Windfall Gething T	Conf	5.5		
Windfall Rundle A	440.0	480.0	+40.0	Re-evaluation - Increased Ri
Windfall Viking C	Conf	2.8		
Wizard Lake D-2 A	103.5	106.0	+2.5	Resumed Production Operations
Wood River D-2 C Water Flood	610.0	633.0	+23.0	Re-evaluation - Increased Ri
Worsley Charlie Lake O	0.0	28.8	+28.8	New Pool
Worsley D-2 C	0.0	8.1	+8.1	
Worsley Montney C	Conf	11.0		
Wrentham Lower Mannville B Water Flood	388.0	428.0	+40.0	Re-evaluation - Decreased N & Increased Ri
Wrentham Lower Mannville E Water Flood	69.0	138.0	+69.0	Enhanced Recovery Recognition
Wrentham Lower Mannville F Primary	50.6	0.9	-49.7	Re-evaluation - Decreased N & Ri
Water Flood	93.9	152.0	+58.1	Re-evaluation - Increased N
Yekau Lake D-1 A	15.7	7.9	-7.8	Re-evaluation - Decreased Ri
Yekau Lake Lower Mannville B	51.4	72.4	+21.0	Pool Development - Increased N
Youngstown Arcs	1278.0	1364.0	+86.0	Re-evaluation - Increased Ri

\* Year-end Review Pools

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# ATTACHMENT I

## 1999 RESERVE CHANGES

Initial Established Crude Oil Reserves  
at 31 December

Pool	1998 10 <sup>3</sup> m <sup>3</sup>	1999 10 <sup>3</sup> m <sup>3</sup>	Change 10 <sup>3</sup> m <sup>3</sup>	Reason for Change
Zama Keg River A	315.0	288.0	-27.0	Re-evaluation - Decreased Ri
Zama Keg River D	167.0	134.0	-33.0	Re-evaluation - Decreased Ri
Zama Keg River V	32.4	24.4	-8.0	Pool Abandoned
Zama Keg River CC Water Flood	318.0	350.0	+32.0	Re-evaluation - Increased Ri
Zama Keg River OO	49.2	74.0	+24.8	Re-evaluation - Increased Ri
Zama Keg River PP	221.3	214.3	-7.0	Pool Abandoned
Zama Keg River HHH	52.0	42.1	-9.9	Pool Abandoned
Zama Keg River JJJ	191.0	183.2	-7.8	Pool Abandoned
Zama Keg River YYY	144.0	120.6	-23.4	Pool Abandoned
Zama Keg River M2M	106.0	110.0	+4.0	Re-evaluation - Increased Ri
Zama Keg River U2U	85.8	81.9	-3.9	Pool Abandoned
Zama Keg River D4D	20.4	16.1	-4.3	Pool Abandoned
Zama Keg River F4F	18.3	19.9	+1.6	Re-evaluation - Increased Ri
Zama Keg River U4U Water Flood	96.0	89.6	-6.4	Pool Abandoned
Zama Keg River Z4Z	20.3	23.6	+3.3	Resumed Production Operations
Zama Keg River X5X	37.5	24.6	-12.9	Pool Abandoned
Zama Keg River E8E	17.1	8.6	-8.5	Pool Abandoned
Zama Keg River N8N	17.2	47.7	+30.5	Re-evaluation - Increased Ri
Zama Keg River D9D	Conf	31.8		
Zama Keg River E9E	0.0	14.8	+14.8	New Pool - Previously part of Zama Muskeg R
Zama Muskeg F	30.2	0.0	-30.2	Coalesced Zama Muskeg F & Keg River N8N Pools
Zama Sulphur Point E2E	0.0	20.8	+20.8	

\* Year-end Review Pools

\*\* Abbreviations

Ri - Recovery Factor

Np - Cumulative Oil Production

RiN - Established Reserves

N - Initial Volume in Place

## ATTACHMENT II

### **SCHEMES WHICH RECEIVED ENHANCED RECOVERY RECOGNITION IN 1999**

<u>POOLS</u>	<u>APPROVAL</u>	<u>DEPLETION MECHANISM</u>
Alderson Lower Mannville D4D	8176	Waterflood
Brazeau River Belly River LLL	8386	Waterflood
Caroline Viking S	8374	Waterflood
Chauvin South Mannville MU #1	8051	Waterflood
Chauvin South Mannville MU #1	6638	Waterflood
Chauvin South Mannville MU #1	8173	Waterflood
Chauvin South Mannville MU #1	8248	Waterflood
Chauvin South Mannville MU #1	8249	Waterflood
Clive D-3 A	7617	Waterflood
Enchant Ars AAA	8417	Waterflood
Enchant Arcs J & VV	8356	Waterflood
Girouxville East BHL B	8510	Waterflood
Hayter Dina A	7009	Waterflood
Leduc Woodbend Blairmore GGG	8403	Waterflood
Manyberries Sunburst C	8560	Waterflood
Sibbald Upper Mannville C	8306	Waterflood
Suffield Upper Mannville UU	8532	Waterflood
Taber Glauconitic K	8195	Waterflood
Valhalla Doe Creek Y	7662	Waterflood
Viking-Kinsella Upper Mannville Z3Z	8555	Waterflood
Viking-Kinsella Upper Mannville A4A	8556	Waterflood